

This Revision is made pursuant to suggestions made by reviewers following initial posting on the interagency web site. Suggested changes are made in **bold** font and preceded by the < symbol for ease in locating each area incorporating a change. Use the search feature found under: Edit, Find and Replace, <

Completion Instructions

Search for the bracket symbol “[“ and tailor the sample to the needs of the local unit. **Text in bold**, which is also preceded by the bracket symbol, represents sample entries which can be replaced. When finished with each instruction, delete bracket and number. Bracketed entries by number:

1. Enter agency solicitation number.
2. Insert geographic or subgeographic area of coverage. Consider like fuels, competition, availability, definition of “local area”, and communities at risk as defined by the National Fire Plan.
3. Insert number of years of contract duration. In areas of developing contractors, use shorter duration. Where there are established contractors, use 5 years.
4. Consider adding federally recognized tribes and possibly state governments if determined legal.
5. Insert base year end date, which need not tie to fiscal year dates.
6. Incorporate applicable items of work, e.g., juniper chaining, sage brush shaving, chipping, chemical treatment, etc.
7. Insert number of crews considered needed by all using agencies.
8. Identify any new units used.
9. Minimum could be established by each contract award or all awarded contracts in total. Include the amount that the awarding agency expects to obligate.
10. Set maximum limit. \$100,000 is suggested.
11. Enter the last date on which task orders may be placed. For five-year contracts, enter the last day five years out.
12. Contracting officer may change wording to say “all awarded contracts in total.” Be consistent with decision made under Instruction No. 8.
13. Enter a dollar amount sufficient to cover anticipated task order amounts of all participating agencies, plus a little, not to exceed the contracting officer’s warrant level.
14. Insert maximum considered to be reasonable for the contractors in the area.
15. Insert estimated start work date of first anticipated task order.
16. Contracting Officer may decide not to set aside for small businesses if the number of local small business is insufficient to meet the needs of the Government.
17. Tailor C.1 to local fuel treatment reduction activities.
18. Tailor to meet local fuel loading for contractors’ information.
19. Modify as needed to coincide with actual contract.
20. Insert applicable management plans and authorities.
21. Insert geographic or subgeographic area
22. Insert appropriate state, county or local air pollution control authority. E.g., The Oregon State Forester issues daily smoke management instructions through the Salem Fire Weather Office. These instructions, as are those issued in other states, are dependent upon weather conditions. Weather conditions and number of units receiving burn clearance vary from season to season. The Government supports the effort to reduce problems in smoke sensitive areas, and agencies will not authorized prescribed burning when the smoke management advisories caution against such actions.

23. For Oregon contracts, insert “ORS Chapter 477 will apply to all Contractor operations except prescribed burning.” Other states may have similar provisions related to contractor liability for fires started while conducting operations.
24. Add or delete definitions as needed.
25. List actual GFP to be provided.
26. Technical specifications are tailored to the Schedule of Items. Add or delete as appropriate.
27. Insert actual geographic area of the contract. (Two instances)
28. Replace bold text with local specific requirement. If none, then delete.
29. Insert prescribed burn season for actual geographic area of contract. (Two instances)
30. Insert known local monitored airsheds.
31. Enter locally-established performance period desired.
32. Inspection methods should be tailored to the actual tasks in the Schedule of Items.
33. Measurement and payment should be tailored to the inspection methods.
34. Insert agency address to submit electronic payment form.
35. Provide appropriate source for threatened and endangered species list.
36. Include for contracts covering Oregon, or replace with appropriate state information.
37. Applicable for multiple award only. Insert relevant local information.
38. Include similar clause to protect Government’s interest in the event of fire. Insert amounts considered necessary. (Two instances)
39. Use the same date entered under Note 10 above.
40. Insert reasonable minimum under which contractors need not accept an order.
41. Insert sample unit maps and data where contractor is to submit a burn plan for evaluation.
42. Attach sample of awarding agency’s form. Each agency will use its own form, e.g. OF-347. (Two instances)
43. Insert geographic area of coverage. (Three instances)
44. Consider giving emphasis to small businesses where appropriate.

SECTION B - SCHEDULE OF ITEMS

**HAZARDOUS FUEL REDUCTION TREATMENTS AND RELATED SERVICES WITHIN [2]
THE KLAMATH BASIN WITHIN OREGON AND NORTHERN CALIFORNIA.**

This is a [3]**5-year** indefinite-delivery, indefinite-quantity contract for the services specified. Offers shall be submitted for all difficulty levels listed below. These prices will be used to determine the price of each task order. The quantities listed are the estimated amounts of each difficulty level anticipated to be ordered throughout the contract. In accordance with Department of the Interior and Related Agencies Appropriation Act, 2001, Public Law 106-291, Contracting Officers from Bureau of Land Management, Bureau of Indian Affairs, Fish and Wildlife Service, National Park Service and USDA, Forest Service are hereby authorized to issue task orders against this contract. [4] Quantities listed below are a standard portion of the estimated quantities, shown in simplified form for evaluation purposes only.

**ENTER PRICES IN THE SPACES BELOW FOR ALL LEVELS OF ANY SUBITEM OF
WORK FOR WHICH YOU WISH TO BE CONSIDERED.**

FIRST YEAR, FROM DATE OF AWARD THROUGH [5]

<u>Sub Item</u>	<u>Description/Level of Difficulty</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Amount</u>
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[6]

Hazardous Fuels Reduction Treatments**Slashing - Subitem A**

A1	Slashing - Level I	1	AC		\$_____
A2	Slashing - Level II	1	AC		\$_____
A3	Slashing - Level III	1	AC		\$_____
A4	Slashing - Level IV	1	AC		\$_____
A5	Slashing - Level V	1	AC		\$_____
A6	Slashing - Level VI	1	AC		\$_____
A7	Slashing - Level VII	1	AC		\$_____

SECTION B - SCHEDULE OF ITEMS (continued)

<u>Sub Item</u>	<u>Description/Level of Difficulty</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Amount</u>
A8	Slashing - Level VIII Girdling - Subitem B	1	AC		\$_____
B1	Girdling - Level I	1	AC		\$_____
B2	Girdling - Level II	1	AC		\$_____
B3	Girdling - Level III	1	AC		\$_____
	Lop and Scatter - Subitem C				
C1	Lop and Scatter - Level I	1	AC		\$_____
C2	Lop and Scatter - Level II	1	AC		\$_____
C3	Lop and Scatter - Level III	1	AC		\$_____
C4	Lop and Scatter - Level IV	1	AC		\$_____
	Selective Slashing - Subitem D				
D1	Selective Slashing - Level I	1	AC		\$_____
D2	Selective Slashing - Level II	1	AC		\$_____
D3	Selective Slashing - Level III	1	AC		\$_____
D4	Selective Slashing - Level IV	1	AC		\$_____
D5	Selective Slashing - Level V	1	AC		\$_____
D6	Selective Slashing - Level VI	1	AC		\$_____
	Pruning - Subitem E				
E1	Pruning - Level I	1	AC		\$_____

SECTION B - SCHEDULE OF ITEMS (continued)

<u>Sub Item</u>	<u>Description/Level of Difficulty</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Amount</u>
E2	Pruning - Level II	1	AC		\$_____
E3	Pruning - Level III	1	AC		\$_____
E4	Pruning - Level IV	1	AC		\$_____
E5	Pruning - Level V	1	AC		\$_____

Fuel Modification Zone Construction - Timber Stands - Subitem F

F1	FMZ Construction - Level I	1	AC		\$_____
F2	FMZ Construction - Level II	1	AC		\$_____
F3	FMZ Construction - Level III	1	AC		\$_____
F4	FMZ Construction - Level IV	1	AC		\$_____
F5	FMZ Construction - Level V	1	AC		\$_____
F6	FMZ Construction - Level VI	1	AC		\$_____
F7	FMZ Construction - Level VII	1	AC		\$_____
F8	FMZ Construction - Level VIII	1	AC		\$_____
F9	FMZ Construction - Level IX	1	AC		\$_____

Fuel Modification Zone Construction - Woodland/Shrubland - Subitem G

G1	FMZ Construction - Level I	1	AC		\$_____
G2	FMZ Construction - Level II	1	AC		\$_____
G3	FMZ Construction - Level III	1	AC		\$_____

SECTION B - SCHEDULE OF ITEMS (continued)

<u>Sub Item</u>	<u>Description/Level of Difficulty</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Amount</u>
G4	FMZ Construction - Level IV	1	AC		\$_____
G5	FMZ Construction - Level V	1	AC		\$_____
G6	FMZ Construction - Level VI	1	AC		\$_____
G7	FMZ Construction - Level VII	1	AC		\$_____
G8	FMZ Construction - Level VIII	1	AC		\$_____
G9	FMZ Construction - Level IX	1	AC		\$_____
Hand Pile And Cover - Subitem H					
H1	Hand Pile and Cover - Level I	1	AC		\$_____
H2	Hand Pile and Cover - Level II	1	AC		\$_____
H3	Hand Pile and Cover - Level III	1	AC		\$_____
H4	Hand Pile and Cover - Level IV	1	AC		\$_____
H5	Hand Pile and Cover - Level V	1	AC		\$_____
H6	Hand Pile and Cover - Level VI	1	AC		\$_____
H7	Hand Pile and Cover - Level VII	1	AC		\$_____
H8	Hand Pile and Cover - Level VIII	1	AC		\$_____
H9	Hand Pile and Cover - Level IX	1	AC		\$_____
H10	Hand Pile and Cover - Level X	1	AC		\$_____
H11	Hand Pile and Cover - Level XI	1	AC		\$_____

SECTION B - SCHEDULE OF ITEMS (continued)

Sub Item	Description/Level of Difficulty	Est Qty	Unit	Unit Price	Total Amount
<u>Prescribed Burning Operations</u>					
Prescribed Fire Plan Preparation - Subitem I					
I1	Presc. Fire Plan, Broad-cast Burn, Understory Burn, & Mop-up	N/A	EA	Incidental to Subitem M	
I2	Presc. Fire Plan, Swamper Burn, Hand Pile Burn, & Mop-up	N/A	EA	Incidental to Subitem L & N	
Fireline Construction and Maintenance - Subitem J					
J1	Fireline Construction & Maintenance - Level I	100	LF	\$_____	\$_____
J2	Fireline Construction & Maintenance - Level II	100	LF	\$_____	\$_____
J3	Fireline Construction & Maintenance - Level III	100	LF	\$_____	\$_____
J4	Fireline Construction & Maintenance - Level IV	100	LF	\$_____	\$_____
Fuels Pullback - Subitem K					
K1	Fuels Pullback - Level I	1	AC		\$_____
K2	Fuels Pullback - Level II	1	AC		\$_____
K3	Fuels Pullback - Level III	1	AC		\$_____
Prescribed Burn and Mop-Up: Swamper Burning - Subitem L					
L1	Swamper Burning - Level I	1	AC		\$_____

SECTION B - SCHEDULE OF ITEMS (continued)

<u>Sub Item</u>	<u>Description/Level of Difficulty</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Amount</u>
L2	Swamper Burning - Level II	1	AC		\$_____
L3	Swamper Burning - Level III	1	AC		\$_____
L4	Swamper Burning - Level IV	1	AC		\$_____
L5	Swamper Burning - Level V	1	AC		\$_____
L6	Swamper Burning - Level VI	1	AC		\$_____
L7	Swamper Burning - Level VII	1	AC		\$_____

Prescribed Burn and Mop-Up: Broadcast and Understory Burn - Subitem M

M1	Prescribed Burning - Level I	1	AC		\$_____
M2	Prescribed Burning - Level II	10	AC	\$_____	\$_____
M3	Prescribed Burning - Level III	100	AC	\$_____	\$_____
M4	Prescribed Burning - Level IV	1000	AC	\$_____	\$_____
M5	Prescribed Burning - Level V	1	AC		\$_____
M6	Prescribed Burning - Level VI	10	AC	\$_____	\$_____
M7	Prescribed Burning - Level VII	100	AC	\$_____	\$_____
M8	Prescribed Burning - Level VIII	1	AC		\$_____
M9	Prescribed Burning - Level IX	10	AC	\$_____	\$_____
M10	Prescribed Burning - Level X	100	AC	\$_____	\$_____
M11	Prescribed Burning - Level XI	1	AC		\$_____
M12	Prescribed Burning - Level XII	1	AC		\$_____

SECTION B - SCHEDULE OF ITEMS (continued)

<u>Sub Item</u>	<u>Description/Level of Difficulty</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Amount</u>
M13	Prescribed Burning - Level XIII	1	AC		\$_____
M14	Prescribed Burning - Level XIV	10	AC	\$_____	\$_____
M15	Prescribed Burning - Level XIIV	10	AC	\$_____	\$_____
M16	Prescribed Burning - Level XIIIIV	10	AC	\$_____	\$_____
M17	Prescribed Burning - Level XVII	1	AC		\$_____
M18	Prescribed Burning - Level XVIII	10	AC	\$_____	\$_____
M19	Prescribed Burning - Level XIX	100	AC	\$_____	\$_____
M20	Prescribed Burning - Level XX	1	AC		\$_____
M21	Prescribed Burning - Level XXI	10	AC	\$_____	\$_____
M22	Prescribed Burning - Level XXII	100	AC	\$_____	\$_____
M23	Prescribed Burning - Level XXIII	1	AC		\$_____
M24	Prescribed Burning - Level XXIV	10	AC	\$_____	\$_____
M25	Prescribed Burning - Level XXV	1	AC		\$_____
M26	Prescribed Burning - Level XXVI	10	AC	\$_____	\$_____
M27	Prescribed Burning - Level XXVII	100	AC	\$_____	\$_____

Prescribed Burn and Mop-Up: Hand Pile Burn - Subitem N

N1	Hand Pile Burn - Level I	1	AC		\$_____
N2	Hand Pile Burn - Level II	1	AC		\$_____

SECTION B - SCHEDULE OF ITEMS (continued)

<u>Sub Item</u>	<u>Description/Level of Difficulty</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Amount</u>
N3	Hand Pile Burn - Level III	1	AC		\$_____
N4	Hand Pile Burn - Level IV	1	AC		\$_____
N5	Hand Pile Burn - Level V	1	AC		\$_____
N6	Hand Pile Burn - Level VI	1	AC		\$_____
N7	Hand Pile Burn - Level VII	1	AC		\$_____
N8	Hand Pile Burn - Level VIII	1	AC		\$_____
N9	Hand Pile Burn - Level IX	1	AC		\$_____
N10	Hand Pile Burn - Level X	1	AC		\$_____
N11	Hand Pile Burn - Level XI	1	AC		\$_____
Additional Mop-Up - Subitem O					
O1	Additional Mop-Up - Level I	1	AC		\$_____
O2	Additional Mop-Up - Level II	1	AC		\$_____
O3	Additional Mop-Up - Level III	1	AC		\$_____
O4	Additional Mop-Up - Level IV	1	AC		\$_____
O4	Additional Mop-Up - Level IV	1	AC		\$_____
O5	Additional Mop-Up - Level V	1	AC		\$_____
O6	Additional Mop-Up - Level VI	1	AC		\$_____
O7	Additional Mop-Up - Level VII	1	AC		\$_____

SECTION B - SCHEDULE OF ITEMS (continued)

<u>Sub Item</u>	<u>Description/Level of Difficulty</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Amount</u>
O8	Additional Mop-Up - Level VIII	1	AC		\$_____
O9	Additional Mop-Up - Level IX	1	AC		\$_____
O10	Additional Mop-Up - Level X	1	AC		\$_____
O11	Additional Mop-Up - Level XI	1	AC		\$_____
O12	Additional Mop-Up - Level XII	1	AC		\$_____
<u>Related Services</u>					
P1	Snag Felling (2-Person Team)	1	TH		\$_____
Q1	Tractor Operations	1	HR		\$_____
Q2	Lowboy Transport	1	MV		\$_____
<u>Unit Holding and Mop-up</u>					
R1	Holding and Mop-up-Level I	1	CH		\$_____
R2	Holding and Mop-up-Level II	10	CH	\$_____	\$_____
R3	Holding and Mop-up-Level III	50	CH	\$_____	\$_____
R4	Holding and Mop-up-Level IV	130	CH	\$_____	\$_____
R5	Holding and Mop-up-Level V	1	CH		\$_____
R6	Holding and Mop-up-Level VI	16	CH	\$_____	\$_____
R7	Holding and Mop-up-Level VII	50	CH	\$_____	\$_____
R8	Holding and Mop-up-Level VIII	130	CH	\$_____	\$_____

SECTION B - SCHEDULE OF ITEMS (continued)

<u>Sub Item</u>	<u>Description/Level of Difficulty</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Amount</u>
R9	Holding and Mop-up-Level IX	1	CH		\$_____
R10	Holding and Mop-up-Level X	16	CH	\$_____	\$_____
R11	Holding and Mop-up-Level XI	50	CH	\$_____	\$_____
R12	Holding and Mop-up-Level XII	130	CH	\$_____	\$_____
R13	Holding and Mop-up-Level XIII	1	CH		\$_____
R14	Holding and Mop-up-Level XIV	16	CH	\$_____	\$_____
R15	Holding and Mop-up-Level XV	50	CH	\$_____	\$_____
R16	Holding and Mop-up-Level XVI	130	CH	\$_____	\$_____
<u>Fire Preparedness Services</u>					
S1	Five-person Crew Up to [7] 4 Crews Needed. ___ Crews Offered	100	TH	\$_____	\$_____
S2	Ten-person Crew Up to [7] 4 Crews Needed. ___ Crews Offered	200	TH	\$_____	\$_____
S3	Twenty-person Crew Up to [7] 4 Crews Needed. ___ Crews Offered	400	TH	\$_____	\$_____
TOTAL - SUB ITEMS A THRU R (FIRST YEAR)					\$_____

[8]

EST = Estimated

AC = Acre

CH = Chains

EA = Each

HR = Hour

LF = Linear Feet

MV=Move

TH = Team Hour

ANNUAL PRICE ADJUSTMENT

SECTION B - SCHEDULE OF ITEMS (continued)

<u>Sub</u> <u>Item</u>	<u>Description/Level</u> <u>of Difficulty</u>	<u>Est</u> <u>Qty</u>	<u>Unit</u>	<u>Unit</u> <u>Price</u>	<u>Total</u> <u>Amount</u>
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Offerors wishing to propose revised prices in successive years shall state in the spaces below the escalation or de-escalation percentages to be used by the Government to compute future year prices, to be effective from October 1 - September 30. For instance, a 3% escalation factor is shown as 3% (rather than 103% or 1.03). If no percentage is entered, future year prices will be the same as base year prices. The factors stated will be compounded annually. Award will be based on the total of the base year plus the four additional years.

Annual Escalation Percentage: _____ OR Annual De-escalation Percentage: _____

The Government may elect to make single or multiple task order contract awards to two or more sources under this solicitation in accordance with Section L, Instructions, Conditions, and Notices to Offeror, Provision 52.216-27.

The minimum guarantee [9] under each contract awarded will be the contractor's maximum order limitation as stated below not to exceed [10] **\$100,000**. Amounts earned for fire suppression assignments by crews working under Subitem S, and subsequently paid under an interagency crew agreement, will count toward this minimum guarantee. See C.5.20.3. For awards made under Subitem S only, the following minimum guarantees apply for each subitem awarded:

- 5-person crew - \$ 25,000 annually ending 365 days after award
- 10-person crew - \$ 50,000 annually ending 365 days after award
- 20-person crew - \$100,000 annually ending 365 days after award

After award, task orders may be placed by the Government. All task orders will be placed no later than [11]. The date of the order placed by the Government will determine the prices for each year as specified above. The total value of all task orders of each awarded contract [12] will not exceed \$ unlimited [13]

The Contractor may limit the maximum dollar value of task orders it is willing to accept from all ordering offices within a 30-calendar day period. The Contractor's maximum order limitation is \$_____ (all offerors insert order limitation. Maximum is [14] **\$250,000** if no amount is shown.)

SECTION B - SCHEDULE OF ITEMS (continued)

The levels of difficulty for all Subitems A thru R are listed in Section C.5 of the specifications. The levels of difficulty of the units in the Sample Task Order (See Section J) establish the rating standards for additional orders. Unlisted units may be ordered, at which time a difficulty rating will be assigned based on the rating standards. Maps will be provided with each task order.

PERFORMANCE TIME: One calendar day per \$1,000 task order value, not to exceed 365 calendar days from date of task order. However, for those task orders which include prescribed fire, performance time shall be 365 calendar days from date of task order. See Clause F.4.0.

ESTIMATED START WORK DATE:[15]

THIS PROCUREMENT IS SET ASIDE FOR SMALL BUSINESS CONCERNS. [16]

To qualify for emergency assignments, the crews shall have been under a regional interagency crew agreement during the CY2000 season. If awarded a contract, the contractor shall be awarded a current national or regional interagency crew agreement in order to be considered for assignment. Crews may be ordered in sizes as listed under Subitem S above. See Section C and Section J for specifications applicable to this work.

SECTION C - DESCRIPTION/SPECIFICATION/WORK STATEMENT

C.1.0 GENERAL [17]

C.1.1 Introduction - The Government is acquiring fuels management services to treat vegetation to reduce the risk of wildland fires. This is intended to meet the intent of the National Fire Plan in accordance with Public Law 106-291.

C.1.2 Background - Project areas are reforestation areas, natural and managed stands of timber of all ages size, and species, shrubfields, or grass areas. Fuels will consist of harvest activity slash, natural fuels, live fuels, and slashed shrubs and trees. Fuel loadings range from less than [17] **½ ton per acre to as high as 100 tons per acre**. Treatments such as brushing, piling, fuelbreak construction, and prescribed fire have been shown to reduce the risk of wildland fire and the severity of fires that do occur. It is the objective of this contract to treat fuels present on units identified to reduce fuel loading and optimize the treatment of those fuels to the most effective burning period.

C.1.3. Scope - [19]

C.1.3.1 The services in this contract are designed to provide for wildfire hazard reduction, prescribed burning and mop-up, and related services. This contract may require vegetation manipulation, burn unit preparation, prescribed burning and mop-up in compliance with its terms, specifications and provisions. This may include the Contractor formulating and preparing written burn plans for submission and approval by the ordering agency; determining when specific burn units are within prescription parameters through field checks of fuel moisture percentages; providing all required crew members, supervision and making all prescribed burn operational decisions ranging from determining that site specific unit conditions are within approved burn plan parameters, through ignition and holding operations, mop-up and patrol until released by the COR. This may include furnishing labor, supervision, transportation, operating supplies, and incidentals to perform all work necessary to conduct slashing, girdling, lop and scatter, selective slashing, pruning, fuel modification zone construction, hand piling and cover, prescribed fire plan preparation, fireline construction and maintenance, fuels pullback, prescribed burning and mop-up, additional mop-up, snag felling, roadblock removal/restoration, requested holding and mop-up. Assignments may be made for emergency fire suppression if the conditions identified on the Schedule of Items are met. During fire assignments, count of contract time on affected task orders will be suspended until the crew(s) return or should return. See Section J, Fire Suppression Requirements.

C.1.3.2 Other fuels reduction activities not priced on the schedule of items are subject to negotiation. Each successful awarded will be offered fair opportunity for these tasks in accordance with F.4.0.

- C.1.4 Applicable Directives - Requested work shall be done in accordance with [20].
- C.1.5 Location of Project Areas - The work will be performed on U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, U.S. Fish and Wildlife Service and National Park Service administered lands or on adjacent non-Federal land. The general location of the work is [21]. See Section J for maps. The specific location of the projects will be shown on maps attached to each task order.
- C.1.6 Boundaries of Project Areas - The project areas are generally identifiable as logged units, by changes in vegetation, roads, or flagging. The boundaries can be adjacent timber stands, recent harvest units, or other natural or manmade features that clearly define the boundary as noted on the project area maps.
- C.1.7 Access to Project Areas - Access is by all-weather and seasonal roads. Seasonal roads may be impassable for several days after heavy rains, or snow-blocked during the winter months.
- C.1.8 Unique Features of Project Areas - Standing timber, wildlife trees and snags may be present within the project sites. Research plots may be located within the project sites and can not be disturbed during mop-up activities.
- C.1.9 Wildfire Fire Guidelines and Procedure - If, in the judgment of the Task Order Manager (TOM) or COR, a slopover that occurs during ignition or mop-up cannot be contained with the personnel and equipment identified in the Countermeasures for Slopover element of the Prescribed Fire Plan, the TOM will declare a wildland fire (see definition of wildland fire). Under this condition, the Contractor shall take immediate action to control, suppress and mop up the escaped fire. The TOM shall notify the responsible office and procedures specified in the Escapement Contingency Plan will be implemented. The Contractor and crew(s) shall work under the direct supervision of the Government and continue working until released by the Government not to exceed 24 hours at no cost to the Government. Once released, the Contractor and/or employees and equipment may be hired for suppression activities at a rate negotiated under agency procedures.
- C.1.10 Smoke Management Clearance for Burning and/or Mop-up
- C.1.10.1 The Government will obtain for the Contractor smoke management clearance from the [22].
- C.1.10.2 It will be at the Government's option which units are ignited on any day(s) due to existing suppression contingencies, priorities of individual units, and smoke management.

C.1.11 Contractor Liability - [23] For prescribed fire, the Contractor shall be liable for suppression cost and resource damages only as a result of failure to follow the approved Prescribed Fire Plan.

C.2.0 DEFINITIONS [24]

Accessible - Road access to a unit. Unit will be considered accessible when road access is within 1/4 mile of the unit.

Backing Fire - A fire spreading or set to spread into (against) the wind, or downhill (see Flanking Fire, Head Fire).

Berm - An outer border of the fire control line.

Burn Boss or Prescribed Fire Incident Commander 1 or 2 (RXB1 or RXB2) - The person responsible for the organizing and management of all personnel and equipment on the burn project and for meeting prescribed burn objectives. Burn Boss I (or RXB1) level is required for complex burns.

Burning out - Setting fire inside a control line to consume fuel between the edge of the fire and the control line.

Burn Plan - Commonly used term for the Prescribed Fire Plan.

Complexity of Burns - The agencies participating in this contract evaluate and rate prescribed burn complexity based on burning period, escape potential, ignition patterns and methods, fuel models, topography, size, values at risk, crew size, safety, and smoke management considerations. Complexity and Level Of Difficulty are not synonymous. Burn complexity is one of several factors that influences of Level of Difficulty. A highly complex burn may not be a highly rated Level of Difficulty. The three levels are described below:

! Complex - Factors which contribute to this rating are: More than a single burning period required for ignition, when fire behavior outside unit is greater than inside the unit, combinations of complex ignition patterns and methods are required, three or more fuel models are present, combinations of slopes and aspects lead to extreme fire behavior, forest burns are more than 40 acres, high values at risk outside the unit may be threatened by an escape, crew size exceeds 20 in ignition and holding, safety risk is high, or potential for smoke intrusion is high, which may require accelerated mop-up even on cool, moist days. Burn Boss I (RXB1) level of experience and training is required for Burn Boss position on Complex rated burns.

- ! Intermediate - Factors which contribute to this rating include broadcast and understory burns that do not meet the above criteria but are not non-complex. This is the standard burn rating. Some control problems may be present due to location, aspects, or the presence of adjacent fuel complexes. Burn Boss II (RXB2) level of experience and training is required for Burn Boss position on Intermediate rated burns.
- ! Non-Complex - Factor which contribute to this rating include all hand pile burns and broadcast burns of small size with less than two acres of continuous fuels. Non-Complex burns have no or minimal control problems present and little to no risk to resources, personnel and equipment. Burn Boss III (RXB2) level of experience and training is required for Burn Boss position on Non-Complex rated burns.

Crew Member or Prescribed Fire Crew Member (FFT2 - Firefighter) - The individual responsible for performing field work aspects of this contract (fireline construction, slashing, hand piling, ignition, holding, mop-up) involving the use of hand tools, chain saws, drip torches, and water handling equipment.

Crew Supervisor - A crew member who provides direction and supervision to fellow crew members during burn unit preparation or wildfire hazard reduction treatments. Is responsible for work accomplishment and performance in accordance with the requirements of the contract.

Cultural and/or Threatened and Endangered (T&E) Sites - Locations where special protection is required to preserve and protect cultural values and species of plants or animals listed on the T&E list.

Cup Trench - A trench constructed on the outer edge of the undercut line, deep enough to catch rolling embers and cones.

DBH - Diameter measured at breast height, 4.5 feet above ground.

Duff - Decaying organic material found on the forest floor (all materials down to mineral soil).

FBPS Fuel Models - There are 13 fuel models used for estimating fire behavior. As described by Anderson H.E., Aids to Determining Fuel Models For Estimating Fire Behavior, GTR INT-122/NFES 1574, April 1982

FFT2 and CRWB - Standard classifications of positions on fire projects as defined in the Wildland Fire Qualifications Subsystem Guide published by the National Wildfire Coordinating Group (NWCG). Publication Numbers PMS 310-1 and NFES 1414. This publication will be available for review in the Lakeview Fire Office, 1000 South 9th Street, Lakeview, Oregon.

Fireline - A fire control line that is dug or scraped to mineral soil by hand or machine according to minimum clearance standards. In certain areas this may be a natural barrier (road, river, rock, etc).

Firing - The intentional setting of fires to fuels during the ignition phase of prescribed burning.

Flank Lines - A fire control line constructed on the side of the unit (running across contours, i.e., up or down the slope).

Flanking Fire - A fire front spreading or set to spread at roughly right angles to the prevailing wind.

Hardwood - A broad-leaved tree which usually has a single well defined trunk and/or attains a height greater than 20 feet. Includes, but not limited to, species such as canyon live oak, chinkapin, bigleaf maple, madrone and oak species. Sprouting hardwood species may be in the form of multi-stemmed clumps.

Hazard - The existence of a fuel complex that constitutes a threat of wildfire ignition, unacceptable fire behavior and severity, or suppression difficulty.

Hazard Reduction - The planned treatment or manipulation of naturally growing vegetation or any other flammable material for the purpose of reducing rate of spread and output of heat energy from any wildfire occurring in the area treated.

Head Fire - A fire front spreading or set to spread with the wind or upslope.

Holding - Actions required to contain the fire within the natural or constructed fireline and prevent escapes and slopovers.

Holding Boss or Holding Specialist (CRWB - Crew Boss) - The individual who provides direction to those personnel responsible for holding the line during the ignition and cool down period(s).

Ignition - Fire started by hand, aerial, or other means.

Infrared Scan - A procedure that locates hot areas through photography or hand held devices (probeye).

Jackpot - Concentration of slash or natural fuels, heavier than the surrounding areas.

Jackpot Burn - Burning Jackpot fuels at a time or conditions that won't allow the fire to spread from the target area.

Ladder Fuels - Fuels that provide vertical continuity between the ground and the tree crowns, thus creating a pathway for surface fire to move into the overstory tree crowns.

Lateral Lines - Hose lays that provide water delivery.

Leave Trees - Trees designated not to be cut. May include conifers, hardwoods, or hardwood clumps with less than or equal to three sprouts of common origin.

Leave Tree Group - A group of 2 -5 plus trees growing within an 8-foot diameter circle at ground level that are of exceptional quality in terms of vigor and structure. Groups may contain more than one species of tree. Examples would be a) two healthy ponderosa pine trees growing immediately adjacent to one another. b) a vigorous group white oak trees exhibiting a wide horizontal growth pattern. c) a large old pine with a healthy madrone tree growing near its base. The project inspector can show examples of suitable tree groups on the ground. Douglas-fir will not be considered for a leave tree group when it is the only species present. It may be included in a group when it is present in a minority amount.

Leave Shrub Clump - A group of 2 to 4 shrub plants with stems growing within a 6-foot diameter circle at ground level that are the same species.

Lighting Boss or Ignition Specialist 1 or 2 (RXI1 or RXI2) - Provides direction to lighting crew during ignition of the unit.

Litter - Needles, duff, twigs, cones and leaves.

Mainline - A hose lay which provides transportation of water from the source to lateral lines.

Mobilization - The act of delivering all ordered personnel and equipment to the project area.

Mop-up - To locate and physically extinguish by the efficient use of water, dirt, chemical agents, or any combination thereof, all burning, smoldering, or burned material.

Mop-Up Boss - The individual who provides direction to those personnel responsible for extinguishing the fire after ignition and holding are completed and until the COR accepts the unit.

Prescribed Fire - Controlled application of fire to wildland fuels in either their natural or modified state, under specified environmental conditions which allow the fire to be confined to a predetermined area and at the same time to produce the intensity of heat and rate of spread required to attain planned resource management objectives.

Prescribed Fire Plan - Also called the Burn Plan. This is a written plan which includes burn area description, resource and prescribed fire objectives, fuels description, weather and fuel parameters, acceptable fire behavior, smoke management and other considerations, ignition schedule, ignition and holding plan, safety considerations, workforce and equipment needs, unit maps, escape contingency plan, crew briefing and go/no go checklist, and the complexity rating of the burn project. The plan must be reviewed and approved prior to implementation. The approved plan constitutes the authority to burn, subject to Paragraph C.1.7.

Project Area - The area being treated with prescribed fire and any escapes or spot fires resulting from the prescribed fire.

Reburn - Open flames that develop and spread during the mop-up phase of the work project.

Reserved Trees or Reserved Areas - Individual species of trees or certain areas within a treatment unit that the contract or COR designates are reserved from treatment.

Riparian Buffer - For prescribed fire purposes, a 50-foot area extending upslope on each side of a stream channel.

RXB1, RXB2, RXI1, RXI2, etc. - Mnemonics for prescribed fire standard classifications of positions as defined in National Interagency Incident Management System Wildland Fire Qualification Subsystem Guide, Part 2 - Prescribed Fire. Publication number PMS 310-1 (Part 2) or NFES 2479, published by the National Wildfire Coordinating Group (NWCG), February 1995.

Shrub (or brush) - Vegetation consisting of woody perennial plant smaller than a tree, usually having permanent single or multiple stems originating at or near the ground level not normally reaching 20 feet in height. Examples are manzanita, ceanothus, hazel, rhododendron, etc.

Slash - Any cut vegetation or existing natural (dead and down) woody debris.

Sloper - A prescribed fire that crosses an established control perimeter but can be contained by personnel and equipment identified in the Prescribed Fire Plan (Countermeasures for Sloper).

Snag - a dead or living tree that has 10 percent or less live crown.

Spike - Sharp pointed limbs of living or dead vegetation.

Spot Fire - Any fire located outside of the burn unit caused by airborne fire brands or radiated heat emitted from the prescribed fire.

Stream Channel - That area influenced by high water at the time of the year with the highest flow.

Surplus Vegetation - Includes vegetation (conifers and hardwoods) greater than 1 foot tall and up to 12 inches DBH; western juniper trees greater than 1 foot tall and up to 16 inches DBH; and shrubs less than 12 inches diameter at ground level; when not selected as leave trees, reserved, or needed to meet spacing requirements. For Fuel Modification Zones, Subitems F and G: Standing dead conifers, hardwoods and shrubs shall be included as surplus when not reserved. For Fuel Modification Zones, Subitem G (Woodlands/Shrublands): All vegetation less than 5 inches DBH shall be included as surplus when not reserved.

Swamper Burning - The concurrent hand piling and burning of existing slash and material severed under this contract; i.e., a small pile is ignited and more logging slash and shrubs are added to the pile while the pile is burning.

Task Order Manager - The TOM is responsible for the project inspection for a identified task order. This person has fire behavior, fuels management experience and is qualified to conduct oversight and evaluation of the Contractors operations. The TOM provides technical expertise to the COR regarding prescribed fire operations.

Tons/Acre - Unit of measurement of fuel, usually but not always, of dead and down woody debris (slash). Tons/Acre is determined by using a Photo Series, such as USDA Forest Service GTR-PNW 51 (1976). These documents are available for review by the contractor by contacting the issuing office.

Top Line - Fireline constructed on the top of the unit (running parallel to the contours, i.e., across the slope).

Understory burn - Prescribed broadcast burn on an area which has an overstory of conifer trees. Prescribed burn objective includes burning the area in such a manner as to prevent mortality of the overstory trees.

Undercut Line - Fireline constructed on the bottom of the unit (running parallel to the contour, i.e., across the slope).

Water Bar - Trenches cut at a 45-degree angle across the fireline to deflect water and reduce erosion.

Wildland Fire - An escaped prescribed fire is a wildland fire. The TOM determines that an escape exists based on either, or both of two criteria: (1) When containment of a slopover requires personnel or equipment exceeding that specified in the Countermeasures for Slopover element of the Prescribed Fire Plan; (2) When environmental conditions and/or fire behavior exceeds that specified in the Prescribed Fire Plan and the TOM determines that an escape has or is likely to occur. The declaration of an wildland fire for contract proposes can only be made by the COR.

Wildlife Trees - Standing dead or live trees left for nesting, feeding, perching and shelter for birds and mammals. Trees may be marked with paint and/or designated with a tag stating it is a wildlife tree or as identified by the COR.

C.3.0 CONTRACTOR-FURNISHED PROPERTY AND SERVICES

C.3.1 Unless otherwise specified herein, the Contractor shall provide all labor, transportation, materials, and equipment necessary to perform the work as described herein. For prescribed burn activities the Contractor shall meet all requirements as stated in the prescribed burn plans including Wildland and Prescribed Fire Qualification System Guide, published by the National Wildfire Coordinating Group, Publication Numbers PMS 310-1 and NFES 1414, January 2000. (available at www.nwcg.gov)

C.3.2 Work Camps - Camping on agency administered lands will only be allowed in approved sites and with the prior written authorization of the responsible land manager. Should such a work camp be authorized, the Contractor shall maintain the camp in an orderly and sanitary manner. All fire regulations and permits shall be followed. All garbage and refuse shall be removed from the camp site(s) by the Contractor and disposed of off site before final payment is made.

C.3.3 Tractor - Operations such as roadblock removal and restoration, crushing of vegetation, fireline construction, mop-up of landings, and prescribed burn holding operations will require the use of a tractor with trailer. Tractor size of 24,000 pounds gross operating weight, and 95 horse power or less is required. (Example: equivalent to Caterpillar D-4, John Deere 450, Komatsu D45A, Case 750, MF 300, or smaller sizes). Other type mechanized equipment capable of performing roadblock removal and restoration may be used if capable of performing the operation. Tractor operations including roadblock removal and restoration, crushing of vegetation, and mop-up of landings are included in Item Q. Tractor fireline construction is within Item J. The Contractor may consider the use of a tractor for holding and slopover/escape fire contingency purposes when planning and implementing prescribed burning. The cost for unit contingency utilizing a dozer shall be included within subitem M. The use of a tractor for these purposes should be included in Prescribed Fire Plan, and will require prior approval by the COR.

- C.3.4 Helicopter Aerial Ignition - Aerial ignition method rather than hand ignition may be required for some burns due to safety considerations for ignition personnel, and/or to meet resource and prescribed fire objectives. This would typically include one or more of the following conditions: shrub fuel types where vegetation is dense or above waist height; burn intensity is high or flame lengths predicted would exceed the 4 to 12 feet range; burn season is during the late fall and winter and fuel type would require aerial ignition to meet fuel reduction objectives; or travel by foot through the unit is slow and difficult. Required aerial ignition would only occur for prescribed broadcast or underburns, in Subitems M1 - M27.
- C.3.5 Project Layout and Cultural Surveys by Contractor - The Contractor shall utilize maps and/or photos provided by the Government to locate and mark the perimeter of each project with Contractor-provided flagging. The Government may have located part or all of the perimeter for any project. If the project area is crossed by a Riparian Buffer, the Contractor shall mark the buffer boundaries and follow the protection instructions included in the task order. The Contractor shall provide a Government-trained and approved Designated Archeological/Botanical Technician (DA/BT) to survey the route of any fire trail prior to construction. The DA/BT will be provided one-time training to conduct Cultural and Botanical Surveys following the Oregon State Historic Preservation Office guidelines and threaten and endangered (T&E) plant protocols. All survey reports are to be submitted to the Government within 30 days of completion of survey. Cultural and T&E sites are to be avoided during fire trail construction and mop-up operations.
- C.3.6 Security of Materials - The Contractor may leave its equipment and Government-furnished property at the work site. The Contractor shall be responsible for the Contractor's equipment and Government-furnished property if it should be lost, stolen or damaged.
- C.3.7 Noxious Weeds - Insure that all equipment is cleaned off prior to operating on Government lands. Remove all dirt, grease, and plant parts that carry noxious weed seeds or vegetative parts. This may be accomplished with a pressure hose. In addition ,if equipment is found operating in a noxious weed area, the equipment must be cleaned before moving to another area.
- C.3.8 CREW REQUIREMENTS for Subitem S, Fire Preparedness Services - During the performance period specified in Paragraph C.5.20.1, the contractor shall maintain at least the number of crews offered on the Schedule, consisting of the following size and strength:
- a. A 5-person crew shall consist of a minimum of 2 Firefighter Type 1 (FFT-1) personnel and the remainder of the crew shall be Firefighter Type 2 (FFT-2).
 - b. A 10-person crew shall consist of 1 Crew Boss (CRWB), 1 Squad Boss Firefighter Type 1 (FFT-1), and 8 Firefighter Type-2 (FFT-2).

c. A 20-person crew shall consist of 1 Crew Boss (CRWB), 2 Squad Boss Firefighter Type 1 (FFT-1), and 17 Firefighter Type 2 (FFT-2).

C.3.8.1 Crew Maintenance - Contractor shall maintain the required crew strength at all times and replace any non-working crew member prior to the next shift with certified personnel.

C.3.8.2 Personal Protective Equipment and Clothing - Provide and maintain the equipment and clothing as specified in Section J, Personal Protective Equipment and Clothing.

C.4.0 GOVERNMENT-FURNISHED PROPERTY AND SERVICES

C.4.1 All Government furnished equipment and supplies, hereinafter referred to as Government-furnished property, will be picked up by the Contractor at the Lakeview Fire Office, (except as otherwise specified), at 1000 South 9th Street, Lakeview, Oregon and signed for on Form DI-105 by the Contractor or Contractor's authorized representative. The Contractor shall return all Government furnished-property within 24 hours from final acceptance. At time of return, the Contractor shall furnish the COR with an inventory of property being returned. The Contractor shall be responsible for any shortages of Government-furnished property.

C.4.2 The Government shall furnish property and services as listed below [25]:

- a. A Government hand-held portable radio for communication with the Fire Office, TOM or COR on all prescribed burning operations.
- b. Photo Series to help Contractor to estimate fuel loadings, maps and aerial photos to assist Contractor in layout of project units when requested.
- c. BEHAVE computer software (fire behavior prediction program) to assist Contractor in meeting specific fire behavior at the site, as required in the Prescribed Fire Plan.
- d. Unit Prescribed Fire Plans. The Government will provide a Prescribed Fire Plan form for each burn unit. These plans may vary in agency format. The plans will indicate resource and prescribed fire objectives, fuels descriptions, establish fuel and weather parameters, fire behavior, smoke management and any other special considerations. Because of this large volume of paper, the Prescribed Fire Plans are not included with this solicitation, but are available at the Lakeview Fire Office. Sample fire plans are included in Section J.
- e. Weather forecast and other weather information will be available for use by the Contractor at the District Office. These products are now available on the Internet. The Government will provide address at the request of the Contractor.

- f. Threatened and Endangered Species information, cultural survey information and reporting formats, maps, photos and training provided under Paragraph C.3.8.
- C.5.0 SPECIFIC TASKS [26]
- C.5.1 Slashing - Subitem A
- C.5.1.1 Level of Difficulty - The level of difficulty for slashing is determined by the task order. The level is based on the relative amount of the material to be slashed, according to size of material to be slashed, as described in C.5.1.2 and C.5.1.3, and percent cover, as follows:
- Subitem A1 - Level I - Unit density of material to be severed is estimated to average 20 percent or less of total cover.
- Subitem A2 - Level II - Unit density of material to be severed is estimated to average between 21 and 40 percent cover.
- Subitem A3 - Level III - Unit density of material to be severed is estimated to average between 41 and 60 percent cover.
- Subitem A4 - Level IV - Unit density of material to be severed is estimated to average greater than 61 percent cover.
- Subitem A5 - Level V - Unit density of material to be severed is estimated to average 20 percent or less of total cover.
- Subitem A6 - Level VI - Unit density of material to be severed is estimated to be between 21 and 40 percent cover.
- Subitem A7 - Level VII - Unit density of material to be severed is estimated to be between 41 and 60 percent cover.
- Subitem A8 - Level VIII - Unit density of material to be severed is estimated to be greater than 61 percent cover.
- C.5.1.2 Subitems A1, A2, A3, A4: All live, standing vegetation, between 1 inch DBH and 6 inches DBH shall be completely severed with the stump height not to exceed 6 inches. This will be the standard size for treatment unless otherwise designated. The task order may designate a different size within this range for individual units (example: slash 1-4 or 2-6 inches only, instead of the 1-6 inches), but not outside the 1-6 inch DBH range. Individual species may be specified as reserved from cutting on individual units.

C.5.1.3 Subitems A5, A6, A7 and A8: All live, standing vegetation, greater than 2 feet in height and 3 feet in length, but not over 6 inches DBH shall be completely severed with the stump height not to exceed 6 inches. This will be the standard size for treatment unless otherwise designated . The task order may designate a different size within this range for individual units (example: slash greater than 4 feet in height and/or 4 feet in length, instead of the 2 feet height and/or 3 feet length up to 6 inches DBH), but not outside the original range limits. Individual species may be specified as reserved from cutting on individual units.

C.5.1.4 Each task order will specify the level of difficulty, size limits for treatment, whether hardwoods and/or conifers are included, and if any individual species are reserved from treatment.

C.5.1.5 Slashing shall be accomplished throughout the entire unit, excluding areas identified by the task order as reserved from treatment. Fire lines shall remain free of debris. Restore Fire lines to original clear condition following slashing.

C.5.2 Girdling - Subitem B

C.5.2.1 Level of Difficulty - The level of difficulty for girdling is determined by the task order. The level is based on the expected number of trees to be girdled.

Subitem B1 - Level I - The expected number of trees to be treated is less than 30 trees per acre.

Subitem B2 - Level II - The expected number of trees to be treated is between 30 and 60 trees per acre.

Subitem B3 - Level III - The expected number of trees to be treated is between 60 and 120 trees per acre.

C.5.2.2 Girdling shall be accomplished in one of two manners, as designated in the task order:

- a. All hardwoods and/or conifers between 6 inch DBH and 16 inches DBH shall be girdled. Three (3) horizontal chain saw cuts shall be made completely around the bole of each hardwood tree, and two (2) horizontal chain saw cuts shall be made completely around the bole of each conifer tree; such that the minimum cut depth inside the cambium is ½ inch. Cut shall be made below the lowest live limb. If limbs extend to ground level, cut lower limbs within 1 foot of ground level.
- b. All hardwoods and/or conifers between 4 inches DBH and 16 inches DBH shall be girdled in such a manner as to create a 4 to 6-inch wide horizontal band cut completely around the bole of each tree such that the cambium is removed. Made cuts below the lowest live limb.

These will be the standard tree DBH size for treatment unless otherwise designated. The task order may designate a different size within this range for individual units (example: girdle trees 6-10 or 4-6 inch DBH only). Individual species may be specified as reserved from girdling on individual units.

C.5.2.3 Each task order will specify the level of difficulty, one of the specifications from C.5.2.2, and the size range limits for treatment, whether hardwoods and/or conifers are included, and if any individual species are reserved from treatment. With written approval from the CO, fall trees instead of girdling.

C.5.2.4 Accomplished girdling throughout the entire unit, excluding areas identified by the task order as reserved from treatment.

C.5.3 Lop and Scatter - Subitem C

C.5.3.1 Level of Difficulty - The level of difficulty for lop and scatter is determined by the task order. The level is based on the amount of the slash to be treated, access to the project site, and reduction height of slash.

Subitem C1 - Level I - The amount of slash to be lopped and scattered averages less than 12 tons per acre. Site is accessible or walk-in of less than 1/4 mile is required. Reduced slash to the extent that it is within 12 inches of the ground at all points.

Subitem C2 - Level II - The amount of slash to be lopped and scattered averages between 12 and 20 tons per acre. Site has limited access or walk-in of less than 1/4 mile is required. Reduced slash to the extent that it is within 20 inches of the ground at all points.

Subitem C3 - Level III - The amount of slash to be lopped and scattered averages less than 12 tons per acre. Access requires a walk-in of up to 1 mile. Reduced slash to the extent that it is within 12 inches of the ground at all points.

Subitem C4 - Level IV - The amount of slash to be lopped and scattered averages between 12 and 20 tons per acre. Access requires a walk-in of up to 1 mile. Slash shall be reduced to the extent that it is within 20 inches of the ground at all points.

C.5.3.2 Slash to be Treated - The material to be treated consists of down woody material created from vegetation treatments (such as harvest, thinning, or slashing, etc.) or created through natural process.

C.5.3.3 Lop and scatter all existing slash so that all top and side branches are free of the central stem so that the slash is reduced to within the limit of the ground at all points, as stated for the level of difficulty. Central stem length shall not exceed 12 feet.

C.5.4 Selective Slashing - Subitem D

- C.5.4.1 Level of Difficulty - The level of difficulty for selective slashing is determined by the task order. The level is based on the expected number of leave trees per acre to be treated and/or spacing between leave trees, or the relative amount of material to be slashed.

Subitem D1 - Level I - 109 acceptable leave trees at a 20' X 20' spacing. Unit density is estimated to average less than 40 percent cover.

Subitem D2 - Level II - 109 acceptable leave trees at a 20' X 20' spacing. Unit density is estimated to average between 40 and 60 percent cover.

Subitem D3 - Level III - 109 acceptable leave trees at a 20' X 20' spacing. Unit density is estimated to average greater than 60 percent cover.

Subitem D4 - Level IV - A specific spacing footage will be designated by Government, within the range of 15' X 15' up to 45' X 45' for conifers and hardwoods in combination. The number of acceptable leave trees will be determined by the spacing designated (15' X 15' spacing equals 194 trees/acre, 45' X 45' spacing equals 22 trees/acre). Unit density is estimated to average less than 40 percent cover.

Subitem D5 - Level V - A specific spacing footage will be designated by Government, within the range of 15' X 15' up to 45' X 45' for conifers and hardwoods in combination. The number of acceptable leave trees will be determined by the spacing designated (15' X 15' spacing equals 194 trees/acre, 45' X 45' spacing equals 22 trees/acre). Unit density is estimated to average between 40 and 60 percent cover.

Subitem D6 - Level VI - A specific spacing footage will be designated by Government, within the range of 15' X 15' up to 45' X 45' for conifers and hardwoods in combination. The number of acceptable leave trees will be determined by the spacing designated (15' X 15' spacing equals 194 trees/acre, 45' X 45' spacing equals 22 trees/acre). Unit density is estimated to average greater than 60 percent cover.

C.5.4.2 Criteria for Selection of Leave Trees

- a. The best available acceptable leave trees, both conifers and hardwoods, shall be selected as leave trees and treated in accordance with spacing requirement and the number per acre specified by the Level of Difficulty. The average spacing may vary + or - 20% of the spacing stated in the Level of Difficulty in order to select the best leave trees without numerically changing the average number of leave trees per acre.
- b. The largest, healthiest, best-formed trees shall be selected as leave trees. Characteristics used in the selection of leave trees include the following:

- 1) Has no apparent damage to the main bole;
 - 2) Is not chlorotic;
 - 3) Demonstrates good vigor and is disease free;
 - 4) Has at least 40 percent crown ratio.
- c. In areas containing a variety of conifer species, leave trees shall be selected using the following species preference:
- 1) Sugar pine or ponderosa pine
 - 2) Douglas-fir
 - 3) Incense cedar
 - 4) True fir
- d. Exceptions to the species preference guidelines stated above will be identified by the Government on each unit. Theses can include changing the order and/or identifying species other than those stated above.
- e. The Government may identify additional individual leave trees or leave tree areas within each unit.

C.5.4.3 Treatment of Surplus Vegetation

- a. All vegetation not selected as acceptable crop trees over three feet tall and up to 7 inches DBH within the specified spacing of acceptable leave tree shall be severed one foot or less above the ground. No live limbs shall be left on the stump of any cut stem.
- b. All conifers over one foot tall and up to 7 inches DBH not selected as acceptable leave trees and within the specified spacing of acceptable leave tree shall be completely severed one foot or less above the ground. No live limbs shall be left on the stump of any cut stem.
- c. Vegetation greater than 7 inches DBH shall not be cut.
- d. Hardwood vegetation from 7 inches to 12 inches DBH shall be girdled. Hardwood vegetation greater than 12 inches DBH shall not be treated.
- e. Acceptable crop trees shall not be damaged while cutting vegetation, or buried with slash.

C.5.4.4 Unless further treatment of slash is prescribed, such as hand piling and burning, swamper burning or underburning, lop and scatter the resulting slash to a maximum 12-foot length and a depth not to exceed 24 inches.

C.5.4.5 No slash cut by the Contractor shall be left on the ground within 25 feet of any road or outside the project area. Remove all slash at least 25 feet from the road shoulder on the upper (uphill) side, and 50 feet on the lower (downhill) side.

C.5.4.6 Individual species may be specified as reserved from selective slashing on individual units.

C.5.5 Pruning - Subitem E

C.5.5.1 Level of Difficulty - The level of difficulty for pruning is determined by the task order. The level is based on the expected number of trees per acre (TPA) requiring treatment.

Subitem E1 - Level I - Less than 20 TPA.

Subitem E2 - Level II - 20 - 50 TPA.

Subitem E3 - Level III - 50 - 100 TPA.

Subitem E4 - Level IV - 100 - 150 TPA.

Subitem E5 - Level IV - 150 - 220 TPA.

C.5.5.2 Designated vegetation shall be pruned of live and dead limbs and branches to a designated height measured above ground level. The designated height shall not exceed 12 feet above ground level, and will typically be designated to a height of from 6 to 12 feet. The COR will designate the height for each individual unit. The pruning height may vary + or - one foot from the designated height. Limbs shall be cut cleanly and as close to the bole of the tree as possible.

C.5.5.3 Tree limbs that attach to the bole above the designated pruning height, but have limbs extending into the pruning height area, shall be pruned so that they do not extend below the designated height.

C.5.5.4 Material pruned shall be pulled back 4 feet away from tree bole.

C.5.5.5 Pruning will almost always be ordered in conjunction with slashing, selective slashing, girdling, or burning. It is anticipated that pruning would rarely be ordered as the sole treatment for an area.

C.5.5.6 Individual species of hardwoods and conifers may be specified as reserved from pruning on individual units.

C.5.6 Fuel Modification Zone Construction - Timber Stands - Subitem F

C.5.6.1 Fuel modification zones (FMZs) shall be created to reduce adverse wildfire effects, limit rate of spread, and/or to establish defensible areas for use during fire suppression activities. Flammable material shall be treated and removed from the surface, understory, and canopy. Treatments required in this subitem include cutting of trees, slashing of shrubs and small vegetation, pruning of residual trees, and snag felling. FMZs will normally be created in whole or portions of stands, along ridge lines, between separate stand and vegetative types, or adjacent to private property.

C.5.6.2 Level of Difficulty - The level of difficulty for FMZs are based on percent cover of material to be treated and access to the project site. Level is determined by the task order.

Subitem F1 - Level I - Site is accessible with at least 75 percent of the work site accessible with longest walk-in of 1/4 mile or less. The percent cover of material to be treated is less than 40 percent.

Subitem F2 - Level II - Site is accessible with at least 75 percent of the work site accessible with longest walk-in of 1/4 mile or less. The percent cover of material to be treated is between 40 and 60 percent.

Subitem F3 - Level III - Site is accessible with at least 75 percent of the work site accessible with longest walk-in of 1/4 mile or less. The percent cover of material to be treated is greater than 60 percent.

Subitem F4 - Level IV - Access is limited with at least 50 percent of the work site accessible with longest walk-in of 1/2 mile or less. The percent cover of material to be treated is less than 40 percent.

Subitem F5 - Level V - Access is limited with at least 50 percent of the work site accessible with longest walk-in of 1/2 mile or less. The percent cover of material to be treated is between 40 and 60 percent.

Subitem F6 - Level VI - Access is limited with at least 50 percent of the work site accessible with longest walk-in of 1/2 mile or less. The percent cover of material to be treated is greater than 60 percent.

Subitem F7 - Level VII - Access is limited with 25 percent or less of the site accessible with longest walk-in 2 mile or less. The percent cover of material to be treated is less than 40 percent.

Subitem F8 - Level VIII - Access is limited with 25 percent or less of the site accessible with longest walk-in 2 mile or less. The percent cover of material to be treated is between 40 and 60 percent.

Subitem F9 - Level IX - Access is limited with 25 percent or less of the site accessible with longest walk-in 2 mile or less. The percent cover of material to be treated is greater than 60 percent.

- C.5.6.3 Task orders for Subitems F1 thru F9 will include written instructions designating spacing width; pruning height; any no treatment areas; additional reserve trees, hardwoods, and/or shrubs; and/or girdling instructions.
- C.5.6.4 Spacing - Spacing width shall be designated for each unit in written instructions with each task order. Width designated within the range of 20 to 45 feet. The average spacing may vary + or - 20% of the designated spacing in order to select the best leave trees without numerically changing the average number of leave trees per acre.
- C.5.6.5 Criteria for Selection of Leave Trees
- a. Leave Trees 12" and greater - All conifers and hardwoods (with the exception of western juniper) 12 inches DBH and larger are reserved from cutting or girdling. Western Juniper trees 16 inches and larger are reserved from cutting or girdling. These trees shall be included in spacing requirements.
 - b. Leave Trees < 12" - The largest, healthiest, best formed trees shall be selected as leave trees. Characteristics used in the selection of leave trees include the following:
 - 1) Has no apparent damage to the main bole;
 - 2) Is not chlorotic;
 - 3) Demonstrates good vigor and is disease free;
 - 4) Has at least 40 percent crown ratio, or largest crown ratio if none greater than 40 percent are present.
 - c. In areas containing a variety of conifer species, leave trees shall be selected using the following species preference:
 - 1) Sugar pine or ponderosa pine
 - 2) Douglas-fir
 - 3) Incense cedar
 - 4) True fir
 - d. Exceptions to the species preference guidelines stated above will be identified by the Government on each unit. These can include changing the order and/or identifying species other than those stated above.
 - e. The Government may identify additional individual leave trees or leave tree areas within each unit.

C.5.6.6 Treatment of Surplus Trees and Shrubs

- a. All live and dead conifers, hardwood trees (with the exception of western juniper), and shrubs not selected as leave trees or reserved over one foot tall and up to 12 inches DBH (tanoak up to 16 inches DBH) within the specified spacing of acceptable leave tree shall be severed one foot or less above the ground. No live limbs shall be left on the stump of any cut stem.
- b. The Government may issue instructions with the task order requiring girdling of individual species or all, hardwoods, conifers, or both from 7 inches to 12 inches DBH (western juniper 7-16 inches DBH), instead of cutting. Unless otherwise instructed in the task order, cut surplus trees and shrubs up to 12 inches DBH (western juniper up to 16 inches DBH).
- c. Hardwoods and conifers greater than 12 inches DBH, Western Juniper greater than 16 inches DBH, shall not be cut or girdled, except as provided in C.5.6.9.
- d. Leave trees shall not be damaged while cutting vegetation, or buried with slash.

C.5.6.7 Unless further treatment of slash is prescribed, such as hand piling and burning, swamper burning or underburning, lop and scatter the resulting slash to a maximum 12-foot length and a depth not to exceed 24 inches.

C.5.6.8 No slash cut shall be left on the ground within 25 feet of any road or outside the project area. All slash shall be removed at least 25 feet from the road shoulder on the upper (uphill) side, and 50 feet on the lower (downhill) side.

C.5.6.9 Girdling - Notwithstanding Paragraph C.5.6.6, conifers and hardwoods 7 to 12 inches DBH, and western juniper 7 to 16 inches DBH, may be designated for girdling on individual units. Trees designated for girdling shall have three (3) horizontal chain saw cuts made completely around the bole of the tree. The cuts shall be made such that the minimum cut inside the cambium is ½ inch. Cuts shall be made below the lowest live limb or branch.

C.5.6.10 Bucking of Cut Material - Slashed, cut and felled material shall be bucked into the standard length of 12 feet or less unless otherwise designated by the task order. Longer lengths may be designated in order to meet utilization objectives.

C.5.6.11 Pruning - Leave trees, girdled trees, and leave snags shall be pruned to a height of 6 to 12 feet as designated by the task order. Live and dead limbs and branches shall be cut cleanly and as close to the bole of the tree as possible. Tree limbs and branches that attach to the bole above the designated pruning height, but have limbs or branches extending into the pruning height area, shall be pruned so they do not extend below the designated height.

C.5.6.12 Snag Felling - The TOM may reserve individual snags from felling requirements when snags are deemed necessary for other resource objectives.

C.5.7 Fuel Modification Zone Construction - Woodland/Shrubland -Subitem G

C.5.7.1 Fuel modification zones (FMZs) shall be constructed to create a more sustainable vegetation cover in the event of wildfire. Vegetation density shall be reduced and species composition shall be modified. Activities required in this subitem include species identification and selection of leave trees and shrubs, cutting and girdling of trees, slashing of shrubs and small vegetation, pruning of leave trees and shrubs, and snag felling. FMZs will normally be created in whole or portions of stands, along ridge lines, between separate stand and vegetative types, or adjacent to private property.

C.5.7.2 Level of Difficulty - The level of difficulty for fuel modification zone construction is based on percent cover of material to be treated and access to the project site. Level is determined by the task order.

Sub-item G1 - Level I - Site is accessible with at least 75 percent of the work site accessible with longest walk-in of 1/4 mile or less. The percent cover of material to be treated is less than 40 percent.

Sub-item G2 - Level II - Site is accessible with at least 75 percent of the work site accessible with longest walk-in of 1/4 mile or less. The percent cover of material to be treated is between 40 and 60 percent.

Sub-item G3 - Level III - Site is accessible with at least 75 percent of the work site accessible with longest walk-in of 1/4 mile or less. The percent cover of material to be treated is greater than 60 percent.

Sub-item G4 - Level IV - Access is limited with at least 50 percent of the work site accessible with longest walk-in of 1/2 mile or less. The percent cover of material to be treated is less than 40 percent.

Sub-item G5 - Level V - Access is limited with at least 50 percent of the work site accessible with longest walk-in of 1/2 mile or less. The percent cover of material to be treated is between 40 and 60 percent.

Sub-item G6 - Level VI - Access is limited with at least 50 percent of the work site accessible with longest walk-in of 1/2 mile or less. The percent cover of material to be treated is greater than 60 percent.

Sub-item G7 - Level VII - Access is limited with 25 percent or less of the site accessible with longest walk-in 2 mile or less. The percent cover of material to be treated is less than 40 percent.

Sub-item G8 - Level VIII - Access is limited with 25 percent or less of the site accessible with longest walk-in 2 mile or less. The percent cover of material to be treated is between 40 and 60 percent.

Sub-item G9 - Level IX - Access is limited with 25 percent or less of the site accessible with longest walk-in 2 mile or less. The percent cover of material to be treated is greater than 60 percent.

C.5.7.3 Task orders for Subitems G1 thru G9 will include written instructions detailing spacing, pruning height, any no-treatment areas, reserve trees and shrubs, and/or changes to the order of preference.

C.5.7.4 Reserve Trees and Shrubs

- a. Areas of trees and shrubs may be reserved from treatment in designated units. Reserve areas may be designated by the Government or the Contractor. Prior to the Contractor commencing work in a unit, the Government may designate no-treatment area(s) within each unit, or, the Government may authorize the Contractor to designate the no-treatment area(s) within each unit. No cutting of vegetation shall be done within these designated areas. These areas may range in size from 1/10 acre to 1 acre, and number from zero to twenty. Areas less than one acre in size are included in acreage for payment.
- b. Reserve trees and shrubs shall be designated by the Government with marking (paint, flagging, or sign), or by written instructions. Reserve trees and shrubs shall not be damaged or cut. Reserve trees and shrubs shall not be considered in the spacing of leave trees or shrubs.
- c. Unless otherwise instructed in the task order, the Contractor shall leave any size cedar trees, 8-inch DBH or greater oak trees, 12-inch DBH or greater conifers, and hardwoods, 16-inch DBH or greater western juniper, and 12-inch diameter at ground level or greater shrub. These trees and shrubs shall be considered in the spacing of leave trees and shrub.

C.5.7.5 Selection of Individual Leave Trees and Shrubs, and Groups and Clumps

- a. The Contractor shall select leave trees or shrubs based on written instructions from the Government. These instruction may be in the form of a table, or narrative. The Government will issue instructions prior to issuing Task Order for a unit. The sample

table below lists an example of instructions for selection of the leave trees and shrub species in the order of preference for consideration. The Contractor shall determine preference for selection as leave tree or shrub based on the written instructions.

**ORDER OF CONSIDERATION FOR LEAVE TREE & SHRUB SELECTION -
SAMPLE ONLY**

<u>Species</u>	<u>Size</u>	<u>Comments</u>
Designated reserve trees/shrubs -	all	leave all, do not include in spacing. These can be painted reserved, flagged, bearing trees, boundary marked trees, other special designations.
Cedar	all	leave all, include in spacing.
Hardwoods & other Conifers	12+" DBH	leave all, include in spacing.
Oaks	8+" DBH	leave all, include in spacing.
Oaks	<8" DBH	include in spacing, leave single or group.
Pines	<12" DBH	include in spacing, leave single or group.
Other Hardwoods	<12" DBH	include in spacing, leave single or group.
Douglas-fir	5-12" DBH	include in spacing, leave single.
shrub	12+" stem diameter	include in spacing, leave single or clump.
shrub 1. mahogany 2. Wedgeleaf 3. cherry spp. 4. plum spp. 5. manzanita	<12" stem diameter	include in spacing, leave single or clump.

- b. White Fir and Western Juniper less than 5 inches DBH shall not be selected as leave trees.
- c. Groups and Clumps - Leave tree groups and leave shrub clumps shall be considered for leaving if present. See definitions for Leave Tree Group and Leave Shrub Clump. For spacing purposes, groups and clumps will be considered as one stem.
- d. Spacing of Leave Trees and Shrubs - Spacing for leave trees and shrubs, and for leave groups and clumps will be designated for each unit by the task order. The spacing designated shall be no less than 20 feet and no greater than 45 feet between leave

vegetation. The designated spacing may be varied plus or minus 10 feet in order to choose the best leave tree or shrub.

C.5.7.6 Treatment of Surplus Trees and Shrubs

- a. All live and dead conifers, hardwood trees, and shrubs not selected as leave or reserved over one foot tall and up to 12 inches DBH (western juniper up to 16 inches DBH) within the specified spacing of each acceptable leave tree or shrub stem and leave group and clump shall be severed one foot or less above the ground. No live limbs shall be left on the stump of any cut stem.
- b. The Government may issue instructions with the task order requiring girdling of individual species or all, hardwoods, conifers, or both from 7 inches to 12 inches DBH (western juniper 7-16 inches DBH), instead of cutting. Unless otherwise instructed in the task order, the Contractor shall cut surplus trees and shrubs up to 12 inches DBH (tanoak up to 16 inches DBH).
- c. Hardwoods, and conifers, greater than 12 inches DBH, western juniper greater than 16 inches DBH, and shrubs greater than 12 inches at ground level shall not be cut or girdled except as provided in C.5.7.9.
- d. Leave trees, shrubs, groups and clumps shall not be damaged while cutting vegetation, or buried with slash.

C.5.7.7 Girdling - Notwithstanding Paragraph C.5.7.6, conifers and hardwoods 7 to 12 inches DBH, and western juniper 7 to 16 inches DBH, may be designated for girdling on individual units. Trees designated for girdling shall have three (3) horizontal chain saw cuts made completely around the bole of the tree. The cuts shall be made such that the minimum cut inside the cambium is ½ inch. Cuts shall be made below the lowest live limb or branch.

C.5.7.8 Stump Heights - All conifer stumps shall be cut flush with the ground. All hardwood and shrub stumps shall be cut within 12 inches of the ground.

C.5.7.9 Bucking of Cut Material - Slashed, cut and felled material shall be bucked into the standard length of 12 feet or less unless otherwise designated by the task order. Longer lengths may be designated in order to meet utilization objectives.

C.5.7.10 Pruning - Leave trees, girdled trees, and leave snags shall be pruned to a height of 6 to 12 feet as designated by the task order. Live and dead limbs and branches shall be cut cleanly and as close to the bole of the tree as possible. Tree limbs and branches that attach to the bole above the designated pruning height, but have limbs or branches extending into the pruning height area, shall be pruned so they do not extend below the designated height.

C.5.7.11 Snag Felling - The COR may reserve individual snags from felling requirements when snags are deemed necessary for other resource goals.

C.5.8 Hand Pile and Cover - Subitem H

C.5.8.1 Level of Difficulty - The level of difficulty for hand piling and covering is determined by the task order. The level is based on the number of piles per acre expected, based on the amount of slash on the unit meeting specifications from C.5.8.2, or C.5.8.3. The Government will designate which specification for size of material to be piled with each task order. The following are hand pile and cover levels:

Subitem H1 - Level I - An average of fewer than 18 piles per acre.

Subitem H2 - Level II - An average of 19 to 30 piles per acre.

Subitem H3 - Level III - An average of 31 to 40 piles per acre.

Subitem H4 - Level IV - An average of 41 to 50 piles per acre.

Subitem H5 - Level V - Units with an average of 30 piles per acre or less; access is limited with at least 50 to 75 percent of the work site accessible with longest walk-in ½ mile or less.

Subitem H6 - Level VI - Units with an average of 30 piles per acre or less; access is limited with 25 percent or less of the site accessible with longest walk-in 2 miles or less.

Subitem H7 - Level VII - Units with an average of 31 to 50 piles per acre; access is limited with at least 50 to 75 percent of the work site accessible with longest walk-in ½ mile or less.

Subitem H8 - Level VIII - Units with an average of 31 to 50 piles per acre; access is limited with 25 percent or less of the site accessible with longest walk-in 2 miles or less.

Subitem H9 - Level IX - An average of 51 to 60 piles per acre.

Subitem H10 - Level X - Units with an average of 51 to 60 piles per acre; access is limited with at least 50 to 75 percent of the work site accessible with longest walk-in ½ mile or less.

Subitem H11 - Level XI - Units with an average of 51 to 60 piles per acre; access is limited with 25 percent or less of the site accessible with longest walk-in 2 miles or less.

- C.5.8.2 All slash between 1 and 6 inches in diameter and greater than 2 feet in length shall be piled. Slash less than 1 inch in diameter and less than 2 feet in length shall be left on the ground. Slash left on the ground shall not exceed 1 foot in depth.
- C.5.8.3 All slash less 6 inches in diameter and greater than 2 feet in length shall be piled. Slash less than 2 feet in length shall be left on the ground. Slash left on the ground shall not exceed 1 foot in depth.
- C.5.8.4 All piles shall be constructed by laying limbs, stems, cut boles, and other slash in the pile so as to be parallel with each other. Slash that causes large air spaces in piles shall be cut to eliminate air spaces. Each pile shall include an area of small sized slash (small branches less than ¼ to ½ inch in diameter and/or small branches with needles or leaves attached) to provide “kindling” for prompt ignition and to aid in combustion of larger slash. These fuels shall be placed in the center of the pile.
- C.5.8.5 Unless approved by the COR, maximum pile size shall be 8 feet in diameter by 8 feet in height, and minimum pile size shall be 5 feet in diameter by 4 feet in height.
- C.5.8.6 All piles shall be covered with a minimum of 6-foot by 6-foot piece of 4-mil polyethylene plastic, such that at least 80 percent of the pile's surface area shall be covered. All four corners and the middle of the plastic sheets shall be anchored with slash or other debris.
- C.5.8.7 Piles shall not be closer than 10 feet to reserved trees or 25 feet to a unit boundary, unless approved by the COR. Slash shall not be piled or placed on logs or stumps, in roadways or drainage ditches, or within channel bottoms or streams.
- C.5.8.8 Hand pile and cover shall be completed within 90 calendar days from effective date of the Notice to Proceed for the initial units or for each task order.
- C.5.9 Prescribed Fire Plan Preparation - Subitem I
- C.5.9.1 Subitem I1 - Broadcast Burn or Understory Burn - Submit a Prescribed Fire Plan for each broadcast and understory burn unit. Complete portions covering ignition, holding, escape contingency, mop-up, and crew briefing checklist. Complete an ignition and holding map which indicates initial workforce and equipment placement and utilization. Complete the workforce and equipment needs portion of the plan for the low, desired, and high acceptable prescription range of the fuel and weather parameters. Complete a mop-up plan to meet mop-up objectives for ignition at the low, desired, and high prescription range of the fuel and weather parameters. Complete a site-specific crew briefing checklist which identifies pertinent elements, especially safety, to be covered in preburn crew briefing. The Prescribed Fire Plan shall be very specific and based upon the Contractor's on-site inspection of the unit and environmental conditions. A joint on-site inspection involving both the Contractor and the COR or TOM may be requested by either party to clarify

objectives and resolve deficiencies in the plan. Submit this plan to the COR for approval at least 10 calendar days prior to the estimated ignition date. Sample Prescribed Fire Plan, Broadcast Burn or Understory Burn is shown in Section J.

C.5.9.2 Subitem I2 - Hand Pile Burn or Swamper Burn - Submit a Prescribed Fire Plan for each hand pile burn or swamper burn unit. This plan requires completion of the portions covering ignition techniques, contingency and holding, mop-up/patrol, and personnel and equipment needed for hand pile ignition or swamper burn ignition. Complete a site-specific crew briefing checklist which identifies pertinent elements, especially safety, to be covered in preburn crew briefing. This plan shall be submitted to the COR for approval at least ten calendar days prior to the estimated ignition date. The Prescribed Fire Plan shall be very specific and based upon the Contractor's on-site inspection of the unit and environmental conditions. A joint on-site inspection involving both the Contractor and the COR or TOM may be requested by either party to clarify objectives and resolve deficiencies in the plan. Submit this plan to the COR for approval at least 10 calendar days prior to the estimated ignition date. Sample Prescribed Fire Plan, Hand Pile Burn or Swamper Burn is shown in Section J.

C.5.9.3 The ignition, holding, and escape contingency elements of the Prescribed Fire Plan shall contain the following:

- a. Map at a scale fitting the entire unit (as large as possible) on a 8 ½ by 11-inch sheet of paper, showing ignition technique and pattern, placement of holding crew and equipment, area(s) of concern, and location where weather shall be monitored and documented.
- b. A narrative discussing ignition technique and holding objectives. Indicate what shall be done, when it shall be done, how it shall be done, who shall do it, and shall include work force, equipment and supplies needed.
- c. A narrative discussing contingency action plan if fire escapes control. As a minimum, the following points shall be covered:
 - 1) Identify probable points of escape.
 - 2) Define initial action to be taken, assigning personnel and equipment needed.
 - 3) Identify escape routes and safety hazards in area.

C.5.9.4 Any changes in the ignition and holding elements of the Prescribed Fire Plan shall be submitted to the COR or TOM for approval the day of ignition or before.

C.5.9.5 The mop-up plan shall be a part of the Prescribed Fire Plan. It shall address the mop-up objectives of (1) the prevention of fire escape outside the unit boundaries, (2) prevention of reburn within unit boundaries, and (3) prevention of residual smoke problems in residential and rural interface areas. It shall consist of an initial plan and follow up daily plans beginning on ignition day. The daily plan shall be submitted to the COR or TOM prior to the next day's work and is subject to approval. All daily mop-up submissions shall contain the following:

- a. Map at a scale showing the entire unit and burned areas outside of fireline (as large as possible) on a 8 ½ by 11-inch sheet of paper, pattern of mop-up, placement of crew and equipment, and areas of potential problems (reburn, burning "wildlife trees", landings).
- b. A narrative discussion of mop-up priority, schedule of mop-up, patrol and contingency plans should an escape occur. A separate mop-up strategy shall be developed for low, desired, and high acceptable prescription ranges for each unit.
- c. At the option of the COR or TOM, the initial mop-up plan may be acceptable in lieu of the follow up daily plan.

C.5.9.6 Aerial Ignition Requirement - The Government may determine that individual burn units will require aerial ignition (helitorch or sphere dispenser) methods due to safety considerations for the ignition personnel, and/or are the needed to achieve prescribed fire and resource objectives. Helicopter operations shall comply with agency aviation standards. These units will typically be dense vegetation which is difficult to walk through and has predicted flame lengths exceeding 4-12 foot range, or the planned season of ignition and expected fuel conditions will require aerial ignition to meet objectives. The Prescribed Fire Plan will identify aerial ignition as the sole method for internal unit ignition. Flanks may be hand ignited.

C.5.10 Fireline Construction and Maintenance - Subitem J

C.5.10.1 Level of Difficulty - The level of difficulty for fireline construction is determined by the task order. The level is based on the following:

Subitem J1 - Level I - Fireline construction utilizing a tractor.

Subitem J2 - Level II - Hand fireline renovation, where firelines have previously been constructed. May include up to 200 feet of new construction when existing fireline location is deemed inadequate for holding by the Contractor.

Subitem J3 - Level III - When hand firelines are constructed away from the unit boundaries, outside of unit slash or construction of firelines does not involve cutting through continuous downed slash.

Subitem J4 - Level IV - When hand firelines are constructed on unit boundaries or through continuous downed slash. Throw back or pull back of slash is necessary.

C.5.10.2 All fireline construction shall be performed and maintained in accordance with the following specifications. This applies to the preburn fireline construction and any postburn fireline construction which may be required in the event of a slopover or an escapement.

- a. Location - Unless otherwise designated, firelines shall be located adjacent to the unit boundary, within 50 feet outside of actual unit boundary, firelines shall be located entirely on federal ownership, in locations affording the optimal holding capability. The Government may in situations where ownership boundaries or where special areas of protection exist, choose to clearly mark the pre-burn and post-burn fireline location with colored plastic ribbon. The Contractor shall provide Cultural surveys for the route following State Historic Preservation Office guidelines, the survey results will be provided to the COR before construction begins. The fireline shall be constructed to follow the flagged line as closely as possible. Variations will be permitted if unforeseen obstacles are found. Pacific Yew shall not be cut, cultural and/or T&E sites shall not be damaged. Fireline location shall avoid the necessity of cutting or limbing Pacific Yew. The COR shall be notified if cutting or limbing of Pacific Yew is unavoidable prior to cutting any Pacific Yew.
- b. Clearing Limits
 - 1) Hand fireline shall be cleared to a width of 8 feet and a height of 8 feet. The width shall be measured parallel with the ground (slope distance). The height shall be measured from the side of the line away from the unit. A strip at least 2 foot wide to a maximum of 3 feet wide, and centered within the cleared area shall be cleared to mineral soil. A strip less than 2 feet wide may be designated on some units.
 - 2) Tractor fireline shall be cleared to a single blade width to mineral soil. Height shall be cleared to 8 feet measured from the side of the line away from the unit.
- c. Material to be Cleared - Within the 8-foot line, the following material shall be cut and removed:
 - 1) Ferns, shrubs and other vegetation. Cut to within 18 inches of ground level or as close as possible without damaging tools.

- 2) Cut live trees under four inches in diameter at ground level or as close as possible without damaging tools. No green trees larger than 4 inches shall be cut. The fireline shall be located to avoid larger green trees.
 - 3) Limbs extending within the fireline shall be cut close to the tree if the point of cutting can be reached from the ground (about 8 feet from the ground). Limbs shall be cut when they enter the fireline clearing limits if they cannot be cut at the tree. Limbs cut close to the tree need not be cut flush but "spike" limbs will not be allowed.
 - 4) Slash and litter shall be removed from the 8-foot (both height and width) fireline clearing strip. Natural ground duff need not be removed except from within the 3-foot strip on the fireline work area.
 - 5) A 4 ½ -foot section shall be removed from logs located across the fireline.
- d. Disposal of Cleared Material - Material cut from within the fireline shall be placed on the unit side of the fireline and scattered. Soil berms and piles will not be permitted on top of flammable material. Log sections may be rolled downhill and away from the unit provided that they are left outside the fireline.
 - e. Snags and High Stumps - Snags or high stumps may be left next to the fireline when designated or approved by the Government.
 - f. Side Slopes - On side slopes that are steeper than 30 percent, the 3-foot wide strip shall be cup trenched sufficiently to catch rolling material 6 inches or less in diameter.
 - g. Water Bars - Water bars shall be constructed in all firelines. The water bar shall consist of a diagonal ditch across the three-foot wide mineral soil portion of the fireline, but not in excess of the following guidelines. The water bar shall be approximately 6 inches to 10 inches deep and approximately 5 feet long.
- | | |
|--------------------|------------------------------------|
| Percent of Slopes: | 00% - 09% - 1 Water Bar Every 200' |
| | 10% - 15% - 1 Water Bar Every 100' |
| | 16% - 20% - 1 Water Bar Every 75' |
| | 21% + - 1 Water Bar Every 50' |
- h. Maintenance - Within two days prior to day of ignition, the mineral soil strip along the fire line shall be restored and cleared to mineral soil.

C.5.11 Fuels Pullback - Subitem K

- C.5.11.1 Levels of Difficulty - The level of difficulty for fuels pullback will be determined by the task order. The level is based on the number of trees per acre to be treated, as follows:

Subitem K1 - Level I - Fuels pullback on less than 20 trees or snags per acre.

Subitem K2 - Level II - Fuels pullback on 20 to 40 trees or snags per acre.

Subitem K3 - Level III - Fuels pullback on 40 to 60 trees or snags per acre.

C.5.11.2 All fuels pullback shall be performed in accordance with the following specifications.

- a. Trees/snags to be treated - Perform fuels pullback from leave trees and snags as designated by the task order.
- b. Clearing - Each tree/snag designated for pullback shall be cleared of all surface fuels, including litter, and aerial fuels from a 2-foot wide area, 8 feet in height, around the tree/snag. Material greater than 3" diameter within the clearing zone shall be rolled at least 4 feet from the bole. Care shall be taken to maintain the lower duff layer as damage to sub-surface roots could occur. Clearing shall include removing ladder fuels 8 feet up the bole of the tree/snag. This may require some pruning or cutting of material with a pulaski, handsaw, or chainsaw.
- c. Removed debris - Scatter all removed debris and avoid concentrating the debris. On sloping ground, debris shall be scattered uphill or sidehill from the tree/snag. No removed debris shall be below the tree/snag on a slope. On flat ground, any direction is acceptable.

C.5.12 Prescribed Burn and Mop-Up - Swamper Burn - Subitem L

C.5.12.1 Swamper burning combines hand piling and burning into a concurrent operation. A small pile of slash is created and ignited. More slash is added to the pile while the pile is burning.

C.5.12.2 Levels of Difficulty - The level of difficulty for swamper burning will be determined based on the estimated amount of slash, in tons per acre, requiring burning in accordance with C.5.12.6, and access:

Subitem L1 - Level 1 - Units with an average of 12 tons/acre or less. Unit is accessible.

Subitem L2 - Level II - Units with an average of 13 to 20 tons/acre. Unit is accessible.

Subitem L3 - Level III - Units with an average of 21 or more tons/acre. Unit is accessible.

Subitem L4 - Level IV - Units with an average of 20 tons/acre or less; access is fair with at least 50 to 75 percent of the work site accessible with longest walk-in ½ mile or less.

Subitem L5 - Level V - Units with an average of 20 tons/acre or less; access is limited with 25 percent or less of the site accessible with longest walk-in 2 miles or less.

Subitem L6 - Level VI - Units with an average of 21 tons/acre or more; access is fair with at least 50 to 75 percent of the work site accessible with longest walk-in ½ mile or less.

Subitem L7 - Level VII - Units with an average of 21 tons/acre or more; access is limited with 25 percent or less of the site accessible with longest walk-in 2 miles or less.

- C.5.12.3 The swamper burning season in the [27] **Klamath Basin Cooperative Area** normally can occur between late October and November and between February and March. However, conditions permitting burning may occur at any time from the middle of October through late May. Major control problems can occur during a period of frontal passage and strong wind conditions. Close attention to weather forecasts and securing and patrolling of previously burned units is common practice to eliminate any escaped fires.
- C.5.12.4 All prescribed fire operations shall be initiated only when a Prescribed Fire Plan has been approved and signed by the COR. All elements of the plan shall be followed unless a deviation has been approved in advance by the COR. Conduct a preburn crew briefing, as prepared in the plan.
- C.5.12.5 Clearance to Burn - Notify the Government no later than 1500 hours on the day prior to ignition when specific units are within burn prescription parameters. The Government will notify the Contractor via telephone or direct communications at or before 0900 hours on the day of the proposed ignition of smoke management conditions; and decision to allow or not allow burning.
- C.5.12.6 All slash more than 2 feet long and between 1 inch and 6 inches in diameter at the large end shall be piled and burned. Larger material which has a portion meeting this specification must be bucked at the 6-inch diameter and that portion piled and burned. In all cases, the debris after treatment shall be less than 6 inches deep. Stoke each pile until at least 80 percent of the pile is consumed.
- C.5.12.7 Unless otherwise designated, piles shall not be located closer than 25 feet from unit boundary and reserved areas. Piles shall not be located closer than 10 feet from standing snags, wildlife trees, and live trees in order that no damage occurs to these from burning operation. Slash shall not be piled or burned on logs or stumps, in roadways or drainage ditches, or within reserved areas such as riparian zones, channel bottoms or streams.
- C.5.12.8 During ignition operations, the Contractor's crew supervisor shall maintain contact with the Government representative through the Government-furnished radio communication system or other mutually-agreed-upon communications system at all times.

- C.5.12.9 Conduct holding operations in accordance with the prescribed fire plan. Relocation of manpower and equipment may be required as ignition and burnout progresses. The Contractor's crew supervisor shall be responsible for recognizing the need for and making such relocations, dependent upon on-site weather and fire conditions.
- C.5.12.10 Extinguish any fire outside the fireline of the unit, or unit boundary and promptly report this to the COR or the TOM. A hand fireline shall be constructed completely around each slopover or fire outside the unit using hand tools. The minimum shall be a fireline scraped to mineral soil 1 foot in width with all overhanging combustible material cleared for 3 feet on each side of the fireline and 6 feet overhead.
- C.5.12.11 No felling of any wildlife trees or snags which may have fire in them without approval of the TOM.
- C.5.12.12 Mop-up shall be performed in accordance with C.5.15.

C.5.13 Prescribed Burn and Mop-Up: Broadcast and Understory Burn - Subitem M

- C.5.13.1 Levels Of Difficulty - The Levels of Difficulty for broadcast burns and understory burns are based on the following criteria and descriptions. Level of Difficulty is determined by the task order. Criteria used in determining a Level of Difficulty consists of the following: Season of Ignition, Type of Burn/Potential For Rapid Ignition, Value and Risk, Unit Size, and Road Access. Description of criteria follows:

- a. Season of Ignition - A relative means of describing the time of the year when fuel moisture conditions reach the necessary range of percent moisture content to achieve fuel consumption or retention amounts needed to fulfill prescribed fire and resource objectives contained in each unit Prescribed Fire Plan. The season of ignition listed in the Prescribed Fire Plan will indicate when fuel moisture conditions may typically, but not always, occur based on site specific features (e.g. aspect, canopy closure, slope position and percent, wind exposure, etc.) for each unit. Weather conditions can alter timing of when fuel moisture conditions occur. An inexact explanation of timing for each season follows. These would be used as a rough estimate of when fuel moisture condition parameters in the unit Prescribed Fire Plan might typically occur on the [27]

Klamath Basin Cooperative Area:

Winter - December, January, February

Early Spring - February, March

Spring - April, May

Late Spring - May, June

Summer - June, July

Fall - September, October, November

- b. Type of Burn/Potential For Achieving Rapid Ignition - Different types of burns have the potential to allow for rapid ignition, either by hand ignition or aerial ignition methods. Examples include clearcuts and shrubfields which have no overstory retention objectives or other major holding problems. In general, most broadcast burns will have some potential for rapid ignition on all, or a portion of the unit. Understory burns have less or no potential due to the need to control flame lengths to reduce scorch height and overstory mortality. The subitems are separated by general types of burns.
- c. Value And Risk - Value consists of resource values within the burn unit and adjacent to the unit. Risk is associated with threat to resource values within the burn unit (e.g. overstory trees, coarse woody debris, snags); with fuel type and condition outside the burn unit boundary; and unit layout as these last two relate to holding operation's ability to prevent or contain slopover and escape. Risk of slopover and escape increases when adjacent fuel type would experience greater fire behavior than fuel being ignited. Proximity to Rural Interface Area (RIA) and potential threat to private property and residential structures are a consideration that can influence value and risk criteria.
- d. Unit Size - The size of a unit influences level of difficulty, based on variations within the unit such as multiple aspects, variability of fuel types and amounts, and position of slope. Unit size can also influence level of difficulty based on economics of fixed cost factors when units are small (less than 100 acres) or larger (greater than 10,000 acres). **[28] Unit size in the Klamath Basin Cooperative Area has a higher weighting and influence on per-acre cost.** The Subitems show the importance of unit size.
- e. Road Access - Road access limitations has the potential to influence ignition and holding, and mop-up operations. The Government attempts to mitigate these potential impacts when developing prescribed fire objectives, fuel moisture parameters, and season of ignition. However, road access is still a factor which has the potential to effect level of difficulty.
- f. Levels of Difficulty - Each Level of Difficulty addresses the criteria above with a description and/or example. The determination of the Level of Difficulty is based on a consideration of all the criteria. One or more of the individual criteria can be more important than the others on a specific unit bases. Often they will be interrelated. (An example might be a unit with high value and risk and limited access which causes the Government to designate prescription parameters allowing for an early spring season of ignition, which reduces holding, escape potential, and mop-up requirements.)
Explanation and examples for each Level of Difficulty follow:

Subitems M1 - Level I to Subitem M4 - Level IV- Unit generally has light fuels typical of sage brush and grass. Fuels loads of under 5 tons per acre are common (fuel loads in this type are commonly measured in pounds per acre) with occasional areas up to 10 tons per acre. Sage is at or under 40% cover (40% cover at ground level would visually appear to

be 100). Short grass would make up the difference in the open areas or as an understory fuel to sage. A moderate wind (> 6 mph) is needed to cause fire spread. Fuels are considered to be non-uniform, which affect the difficulty at which fires will spread. Scattered to moderately dense small Western Juniper trees may be in the unit, but have little effect on overall fire behavior. Unit generally has fuel types and conditions conducive to allowing burning in the winter/early spring season prior to green up or after dormant season has begun. These would be broadcast burns with high rapid ignition potential. All levels, except Level 1, Value and Risk concerns are at a minimum, or not an influence on level of difficulty. At Level 1, unit size is affected by values at risk. Long term holding operations would potentially be low or nonexistent as fuels would be expected to burn out quickly with little heat retention or hold over of smoldering material. Unit size is graduated by the subitem. Fuel and environmental features may create large variations in fire behavior and holding operation complexity. Road access is available or if not present has only a limited impact on the operation complexity. An occasional unit will have one or more protection areas within. Mop-up operations are generally not difficult at this level. See C.5.15. Post burn actions would include vigilant patrol and aggressive action on the infrequent but severe problem areas during drying and gusty wind conditions.

Subitem M1 - Level I - Unit size is between 10 and 99 acres with high values and risk.

Subitem M2 - Level II - Unit size is between 100 and 999 acres.

Subitem M3 - Level III - Unit size is between 1000 and 9999 acres.

Subitem M4 - Level IV - Unit size is greater than 10,000 acres.

Subitems M5 - Level V to Subitem M7 - Level VII - Unit generally has litter layer understory fuels typical of ponderosa pine forests (other forest types are possible). Fuels loads range from 10 tons to as high as 80 tons per acre, mostly as a litter and duff layer. Overall the fuelbed is oriented horizontally with a minority of vertical fuels. One half of the fuel load is often litter and duff. Old limbwood and old small stem wood is included within litter layer or rests on top of litter layer. Generally there is a break between the surface fuels and the conifer overstory, occasional smaller trees or tall brush connect both fuel stratum. Unit generally has fuel types and conditions conducive to allowing burning in the spring season prior to green up. A fall dormant season burn is common when area has been burned at least once prior to this entry. These would be underburns with little rapid ignition potential. All levels, except Level V, Value and Risk concerns are at a minimum, or not an influence on level of difficulty. At Level V unit size is affected by values at risk. Long term holding operations would potentially be low in spring burns except adjacent to Fire lines. Fuels would be expected to smolder in duff material and heat retention is expected in heavy fuels during fall burns. Unit size is graduated by the subitem. Fuel and environmental features may create large variations in fire behavior and holding operation complexity. Road access is not always available and may contribute to operational

complexity. Mop-up operations are generally not difficult at this level but could become difficult with severe drying or gusty winds. See C.5.15. Post burn actions would include vigilant patrol and aggressive action on the infrequent but severe problem areas.

Subitem M5 - Level V - Unit size is between 10 and 99 acres with high values and risk.

Subitem M6 - Level VI - Unit size is between 100 and 999 acres.

Subitem M7 - Level VII - Unit size is greater than 1000 acres.

Subitems M8 - Level VIII to subitem M10- Level X - Unit generally has brushfield fuel types and conditions conducive to allowing burning in the early spring or fall seasons. These would be broadcast burns with only isolated overstory clumps or isolated trees, clumps of conifers may require a possible understory burn. Rapid ignition potential is very high. Value and Risk concerns are at a minimum, except at Level VIII. Holding and mop-up operations would potentially be extensive depending on unit size. Fuels would be expected to burn out quickly with some hold over of smoldering material. Mop up is expected along burn edge and spotting is a problem. Fuel and environmental features do create large variations in fire behavior and holding operation complexity. Road access is available and when not present has an impact on the operational complexity. Unit size is graduated by subitem. Examples include but are not limited to natural fuels such as evergreen brushfields or other shrubfields, where dead fuels make up a sizeable portion of the total fuel load. Mop-up requirements are included at this level. See C.5.15.

Subitem M8 - Level VIII - Unit size is between 10 and 99 acres with high values and risk.

Subitem M9 - Level IX - Unit size is between 100 and 999 acres.

Subitem M10 - Level X - Unit size is greater than 1000 acres.

Subitem M11 - Level XI to Subitem M16 - Level XVI - Moderate or high complexity burn. Prescription parameters and objectives and/or fuel type and site conditions are such that the range of fuel moisture conditions and timing of ignition are limited. Unit is at or near an urban /rural interface or intermix. High value at risk, adjacent structures and a high degree of public interest. Season may be spring, late spring, early summer or fall, depending on the unit. Can be either broadcast burn or understory burn. Rapid ignition potential is low or absent. Value and Risk concerns are present, and may be the cause of the limited timing for the burn. Active holding and mop-up operations may be required. Road access limitations may or may not be present. Unit size is graduated by subitem. Examples include but are not limited to hazard reduction burns within or adjacent to subdivisions. Understory burns with natural fuels and/or slash when overstory trees are of a size or condition requiring limitations on flame length, scorch height, and/ fireline intensity. Grass meadows and shrubfield broadcast burns and woodland understory burns might also

be included when value and risk factors are high. Holding and mop-up operations have the potential for a large effort. Unit size has some potential to influence complexity due to public concern and interest. Mop-up operations are included at this level and will be extensive with lengthy post burn patrol. See C.5.15.

Subitem M11 - Level XI - Unit size is between 10 and 99 acres within Urban/Rural Interface. Fuels are typically Grass and Sagebrush.

Subitem M12 - Level XII - unit size is between 10 and 99 acres within Urban/Rural Interface. Fuels are litter and brush, typical of an understory burn.

Subitem M13 - Level XIII - Unit size is between 10 and 99 acres within urban/rural interface. Fuels are typically brushfields with/without isolated clumps or single reserve trees.

Subitem M14 - Level XIV - Unit Size is between 100 and 999 acres within Urban/Rural Interface. Fuels are typically Grass and Sagebrush.

Subitem M15 - Level XV - Unit Size is between 100 and 999 acres within Urban/Rural Interface. Fuels are litter and brush, typical of an understory burn.

Subitem M16 - Level XVI - Unit Size is between 100 and 999 acres within Urban/Rural Interface. Fuels are typically Brushfields with/without isolated clumps or single reserve trees.

Subitems M17 - Level XVII to Subitem M19 - Level XIX- Unit generally has light fuels typical of a marsh and/or tall grass. Fuels loads of under 5 tons per acre are common (fuel loads in this type are commonly measured in pounds per acre) with occasional areas up to 15 tons per acre. Fuels are uniform but would require a wind to create fire spread, especially across wet marsh. Short grass or dead cat tails may make up the understory fuel. Scattered pockets of other fuel types may be in the unit, but have little effect on overall fire behavior. Unit generally has fuel types and conditions conducive to allowing burning in the winter/early spring season prior to green up or after dormant season has begun. These would be broadcast burns with high rapid ignition potential. All levels, except Level XVII, Value and Risk concerns are at a minimum, or not an influence on level of difficulty. At Level XVII unit size is affected by values at risk. Long term holding and mop-up operations would potentially be present as dry season burn may involve peat soils as a ground fuel. Surface fuels over water would be expected to burn out quickly with little heat retention or hold over of smoldering material. Unit size is graduated by the subitem. Road access is generally available and when not present, greatly increases impact on operational complexity. Mop-up operations are generally not difficult at this level. Burns conducted during dry season may have extensive mop-up due to ground fire. See C.5.15.

Post burn actions would include vigilant patrol and aggressive action on the infrequent but severe problem areas during drying and gusty wind conditions.

Subitem M17 - Level XVII - Unit size is between 10 and 99 acres with high values and risk.

Subitem M18 - Level XVIII - Unit size is between 100 and 999 acres.

Subitem M19 - Level XIX - Unit size is greater than 1000 acres.

Subitem M20 - Level XX to subitem M22 - Level XXII - Highly complex burn. Fuel type and site condition create a narrow prescription window, and/or may require ignition in spring-early summer or fall seasons. Understory burn only. Unit may require dual ignition or two-step ignition approach. Ignition rate would be slow to control flame length and scorch height, and facilitate holding operation. Very active holding and mop-up measures might be needed to prevent slop-over, escape, or to meet smoke management concerns. Unit size influences the complexity due to multiple aspects and variations in fuel conditions. Road access may be limited and a complete walk-in may be required. Examples include but are not limited to understory burns with closed canopy cover, shrub understory moderate to dense, ladder fuels present, and large size fuels present. Rapid ignition potential is low or absent. Value and Risk concerns are present, and may be the cause of the limited timing for the burn. The proximity to other ownerships add to the complexity. Active holding, mop-up and patrol operations are required. Unit size influences the complexity due to multiple aspects and variations in fuel conditions. Road access limitations may be present.

Subitem M20 - Level XX - Unit size is between 10 and 99 acres with high values and risk.

Subitem M21 - Level XXI - Unit size is between 100 and 999 acres.

Subitem M22 - Level XXII - Unit size is greater than 1000 acres.

Subitem M23 - Level XXIII to subitem M24 - Level XIV - Moderate complexity burn. Prescription parameters and objectives are such that a wide range of fuel moisture conditions and timing of ignition are possible. Unit generally has fuel types and conditions conducive to burning in a wide seasonal range from early spring through late spring. These are typical of historic broadcast slash burns. Rapid ignition potential is possible, or ignition rate does not require consistent interruptions to regulate fire effects. Value and Risk concerns can be present, but can be diminished by flexibility in burn prescription parameters and season. Holding and mop-up operations are expected to be required, and a large effort may be required if unit is burned at dry end of prescription parameters. Unit size has potential to influence complexity due to multiple aspects and variations in fuel conditions. Road access is available to at least the bottom or midslope of the unit; or it is

limited but impacts burn complexity only at the dry end of prescription parameters. Examples include but are not limited to clearcuts and partial cuts with slash fuel loadings similar to FBPS Fuel Models 11 or 12; understory burns with natural fuels and/or slash when overstory trees are limited and are of a large size resistant to mortality in spring burning; as in shelterwood or seed tree harvest cuts.

Subitem M23 - Level XXIII - Unit size is between 10 and 99 acres with high values and risk.

Subitem M24 - Level XXIV - Unit size is between 100 and 999 acres.

Subitem M25 - Level XXV to subitem M27 - Level XXVII - Moderate or high complexity burn. Prescription parameters and objectives and/or fuel type and site conditions are such that the range of fuel moisture conditions and timing of ignition are limited. Season may be spring, late spring, early summer or fall, depending on the unit. Unit would be an understory burn with both horizontal and vertical orientation of surface fuels. Brush is present in understory and is often needle draped. Clumps of small trees add to difficulty. Rapid ignition potential is low or absent. Value and Risk concerns are present, and may be the cause of the limited timing for the burn. Active holding and mop-up operations may be required. Unit size influences the complexity due to multiple aspects and variations in fuel conditions. Road access is available. Understory burns with natural fuels and/or brush when overstory trees are of a size or condition requiring limitations on flame length, scorch height, and/ fireline intensity. Mop-up operations are generally of moderate difficulty at this level. Burns conducted during dry season may have extensive mop-up. See C.5.15. Post burn actions would include vigilant patrol and aggressive action on the infrequent but severe problem areas during drying and gusty wind conditions.

Subitem M25 - Level XXV - Unit size is between 10 and 99 acres with high values and risk.

Subitem M26 - Level XXVI - Unit size is between 100 and 999 acres.

Subitem M27 - Level XXVII - Unit size is greater than 1000 acres.

- C.5.13.2 The prescribed burning season in the [29] **Klamath Basin Cooperative Area** for understory and broadcast burning normally is between March and the early part of June. However, conditions permitting burning may occur at anytime from the middle of October through late May. Major control problems can occur during a period of frontal passage and strong wind conditions. Close attention to weather forecasts and securing and patrolling of previously burned units is common practice to eliminate any escaped fires.
- C.5.13.3 All prescribed fire operations shall be initiated only when a Prescribed Fire Plan has been approved and signed by the COR. All elements of the plan shall be followed unless a

deviation has been approved in advance by the COR. The Contractor shall conduct a preburn crew briefing, as prepared in the Plan.

- C.5.13.4 Clearance to Burn - The Contractor shall notify the Government no later than 1500 hours on the day prior to ignition when specific units are within burn prescription parameters. The Government will notify the Contractor via telephone or direct communications at/or before 0900 hours on the day of the proposed ignition of smoke management conditions; and decision to allow or not allow burning.
- C.5.13.5 During ignition operations, the Contractor's crew supervisor shall maintain contact with the Government representative on site through the Government-furnished radio communication system at all times.
- C.5.13.6 Conduct holding operations in accordance with the prescribed fire plan. Relocation of manpower and equipment may be required as ignition and burnout progresses. The Contractor's crew supervisor shall be responsible for recognizing the need for and making such relocations, dependent upon on-site weather and fire conditions.
- C.5.13.7 Extinguish any fire outside the fireline of the unit, or unit boundary, and promptly report this to the TOM at the site. A hand fireline shall be constructed completely around any fire or slopover outside the unit fireline using hand tools. The minimum shall be a fireline scraped to mineral soil 1 foot in width with all overhanging combustible material cleared for 3 feet on either side and 6 feet overhead. The Government will identify the fireline with colored plastic ribbon.
- C.5.13.8 No felling of any reserved trees which may have fire in them without approval of the COR.
- C.5.13.9 Mop-up shall be performed in accordance with C.5.15.
- C.5.14 Prescribed Burn and Mop-Up: Hand Pile Burn - Subitem N

- C.5.14.1 Levels of Difficulty - The level of difficulty for Hand Pile Burns will be determined in accordance with C.5.7.1, and access:

Subitem N1 - Level I - Units with an average of fewer than 18 piles per acre. Unit is accessible.

Subitem N2 - Level II - Units with an average of 19 to 30 piles per acre. Unit is accessible.

Subitem N3 - Level III - Units with an average of 31 to 40 piles per acre. Unit is accessible.

Subitem N4 - Level IV - Units with an average of 41 to 50 piles per acre. Unit is accessible.

Subitem N5 - Level V - Units with an average of 30 piles per acre or less. Access is limited with at least 50 to 75 percent of the work site accessible with longest walk-in ½ mile or less.

Subitem N6 - Level VI - Units with an average of 30 piles per acre or less. Access is limited with 25 percent or less of the site accessible with longest walk-in 2 miles or less.

Subitem N7 - Level VII - Units with an average of 31 to 50 piles per acre. Access is limited with at least 50 to 75 percent of the work site accessible with longest walk-in ½ mile or less.

Subitem N8 - Level VIII - Units with an average of 31 to 50 piles per acre. Access is limited with 25 percent or less of the site accessible with longest walk-in 2 miles or less.

Subitem N9 - Level IX - Units with an average of 51 to 60 piles per acre. Unit is accessible.

Subitem N10 - Level X - Units with an average of 51 to 60 piles per acre. Access is limited with at least 50 to 75 percent of the work site accessible with longest walk-in ½ mile or less.

Subitem N11 - Level XI - Units with an average of 51 to 60 piles per acre. Access is limited with 25 percent or less of the site accessible with longest walk-in 2 miles or less.

- C.5.14.2 The burning season for hand piles in the [29] **Klamath Basin Cooperative Area** normally is during November and December. However, conditions permitting burning may occur at anytime from the middle of October through late May. Major control problems can occur during a period of frontal passage and strong wind conditions. Close attention to weather forecasts and securing and patrolling of previously burned units is common practice to eliminate any fire spread from burned piles or escaped fires outside unit boundaries.
- C.5.14.3 All prescribed fire operations shall be initiated only when a Prescribed Fire Plan has been approved and signed by the COR. All elements of the plan shall be followed unless a deviation has been approved in advance by the COR.
- C.5.14.4 Clearance to Burn - Notify the Government no later than 1500 hours on the day prior to ignition when specific units are within burn prescription parameters. The Government will notify the Contractor via telephone or direct communications at/or before 0900 hours on the day of the proposed ignition of smoke management conditions; and decision to allow or not allow burning.

- C.5.14.5 During ignition operations, the Contractor's crew supervisor shall maintain contact with the Government representative on site through the Government-furnished radio communication system at all times.
- C.5.14.6 Stoke each pile until at least 80 percent of the pile is consumed. Units with a high tree cover and pile density shall be staged burned to reduce crown scorch.
- C.5.14.7 Holding typically is not necessary when piles are burned during winter conditions. Conduct holding operations as necessary in accordance with the prescribed fire plan. Relocation of manpower and equipment may be required as ignition and burnout progresses. The Contractor's crew supervisor shall be responsible for recognizing the need for and making such relocations, dependent upon on-site weather and fire conditions.
- C.5.14.8 Extinguish any fire outside the fireline of the unit, or unit boundary, and promptly report this to the COR or GTS. A hand fireline shall be constructed completely around fire inside the unit or slopover outside the unit using hand tools. The minimum shall be a fireline scraped to mineral soil 1 foot in width with all overhanging combustible material cleared for 3 feet on either side and 6 feet overhead. The Government will identify the fireline with colored plastic ribbon.
- C.5.14.9 No felling of any reserved trees which may have fire in them without written approval of the TOM.
- C.5.14.10 Mop-up shall be performed in accordance with C.5.15.

C.5.15 Standard Patrol and Mop-Up

- C.5.15.1 Complete patrol and mop-up of unit(s) to the extent provided for in this section for each subitem to meet the mop-up objectives of (1) the prevention of fire escape outside the unit boundaries, and (2) prevention of reburn within unit boundaries. Patrol and mop-up shall begin immediately following completion of ignition on any portion or whole of each unit.
- C.5.15.2 If the weather conditions, forecasts, fuel conditions change, and/or smoke management concerns occur during patrol and mop-up operations to a point where the standard patrol and mop-up may no longer meet mop-up or smoke management objectives, then the Government may order Additional Mop-up, Subitem O as needed and determined by the Government.
- C.5.15.3 Mop-Up and Patrol for Swamper Burn, Subitems L - Complete patrol and mop-up to meet the objectives described in C.5.15.1 from the time ignition is first started within the unit to 72 hours, or until released from such services by the COR, whichever occurs first. The 72-hour time period begins at 8:00 am the day following completion of ignition in that

unit. Advise the Government of conditions which prevent the meeting of mop-up objectives within the 72-hour period.

C.5.15.4.1 Mop-Up and Patrol for Broadcast and Understory Burn, Subitems M and R - The Complete patrol and mop-up to meet the objectives described in C.5.15.1 from the time ignition is first started within the unit to 8:00 am the day following completion of ignition in that unit, or until released from such services by the COR, whichever occurs first. Complete 100 percent mop-up of all spot fires and slopovers outside the unit boundary and within the first 50 feet inside of unit boundary.

OR in lieu of C.5.15.4.1, the Government may request the Contractor to:

C.5.15.4.2 Mop-Up and Patrol for Broadcast and Understory Burn, Subitems M and R - Complete patrol and mop-up to meet the objectives described in C.5.15.1. Complete 100 percent mop-up of all spot fires and slopovers outside the unit boundary and within the first 50 feet inside of unit boundary. Complete this mop-up within 96 hours of 8:00 am on the day following completion of ignition. After 48 hours, advise the Government if mop-up will be completed within the 96-hour period.

C.5.15.5 Mop-Up and Patrol for Hand Pile Burn, Subitems N - Complete patrol and mop-up to meet the objectives described in C.5.15.1 from the time ignition is first started within the unit to 24 hours, or until released from such services by the COR, whichever occurs first. The 24-hour time period begins at 8:00 am the day following completion of ignition in that unit. Advise the Government of conditions which prevent the meeting of mop-up objectives within the 24-hour period.

C.5.15.6 Patrol shall include the checking for, and mop-up of burning material that threatens the achievement of mop-up objectives or the mop-up standards for each subitem. Patrol shall also include taking the following actions to prevent fire escape outside the unit boundary and/or to prevent reburn within the unit boundary. Immediately take actions to fireline, mop up, and identify all slopovers or spot fires. If Contractor is unable to contain or control slopover or spots with patrol resources, promptly, within 30 minutes after discovery, notify the Government of the situation and continue to take action to contain or control fire.

C.5.15.7 Completely extinguish all burning material within the designated mop-up area.

C.5.15.8 Mechanical equipment used must keep soil disturbance to a minimum. Mechanical equipment can only be used on landing areas. Use anywhere in the unit other than landings must be approved in writing by the COR.

C.5.15.9 No felling of any reserved trees which may have fire in them without written approval of the TOM.

- C.5.15.10 The Contractor may use wetting agents, retardants, foam, or suppressants with written approval from COR during mop-up and ignition operations. Contractor is responsible for assuring these do not leak or spread into streams, water sources or standing water. Root wads (uprooted stumps with roots attached) shall be thoroughly extinguished (dug around and rotten or loose wood scraped off). Fireline berms shall be thoroughly extinguished.
- C.5.15.11 Unsafe logs and chunks with a minimum size of 12 inches x 4 feet up to a maximum of 20 inches x 8 feet on slopes greater than 50% shall be turned and placed in a manner that provides for safety in preventing this debris from rolling.
- C.5.15.12 Project Area Reburn - Should a reburn occur during the mop-up operation, suppress the fire and notify the Government immediately. The cost of reworking the area to contract requirements shall be borne by the Contractor.
- C.5.15.13 Mop-up contingencies are established and will be initiated by the COR for the following situations:
- a. If a red-flag watch or warning is issued or predicted by the National Weather Service for extreme fire weather conditions; or if smoke emissions from the burn unit during mop-up are creating air quality impacts to the air quality of [30] **Klamath Falls, Lakeview**, or other smoke sensitive areas, the Contractor may be required to complete mop-up within a 24-hour period. If satisfactory progress is not made, or a mop-up plan is not provided that ensures completion within the 24-hour period, the Government, when determined necessary, may immediately assume control of the project area and provide manpower and/or equipment to complete the work. In this event, the contractor will be liable for the cost to the Government of performing mop-up.
 - b. If a slopover occurs on a burn unit during ignition or mop-up and is declared an escaped fire by the COR, the Government will immediately assume control of the project area. Following declaration of the wildland fire, Contractor's personnel shall be made available to the Government for fire suppression and will be paid at the applicable firefighting rates paid by the Government. See E.4.2.5.
- C.5.16 Additional Mop-Up - Subitem O
- C.5.16.1 Additional mop-up may be ordered by the Government for unit(s) when the Government determines that the standard mop-up included in Prescribed Burn and Mop-Up Subitems L, M, N and R is insufficient to meet objectives. The Government may request mop-up by task order on units not ignited by the Contractor.
- C.5.16.2 Levels of Difficulty - Twelve levels of difficulty for additional mop-up will be determined based on the time of year in which the mop-up is to be performed, and the estimated post

burn fuel load. The time of the year influences fuel moisture conditions, ignition and burnout of fuels, and weather conditions (such as humidity recovery) which effect difficulty in extinguishing burning material. One level of difficulty will be based on rapid mop-up requirement to reduce impact of residual smoke, or to secure unit prior to adverse weather event. Level is determined by the task order.

Subitem O1 - Level I - Mop-up is performed from November 1 thru April 30. Post burn fuel loads range between .01 to 9.9 tons per acre.

Subitem O2 - Level II - Mop-up is performed from May 1 thru June 30. Post burn fuel loads range between .01 to 9.9 tons per acre.

Subitem O3 - Level III - Mop-up is performed from July 1 thru October 31. Post burn fuel loads range between .01 to 9.9 tons per acre.

Subitem O4 - Level IV - Mop-up is required to be 100 percent completed in the unit or designated portion of unit within a 24-hour period. Post burn fuel loads range between .01 to 9.9 tons per acre.

Subitem O5 - Level V - Mop-up is performed from November 1 thru April 30. Post burn fuel loads range between 10 to 49 tons per acre.

Subitem O6 - Level VI - Mop-up is performed from May 1 thru June 30. Post burn fuel loads range between 10 to 49 tons per acre.

Subitem O7 - Level VII - Mop-up is performed from July 1 thru October 31. Post burn fuel loads range between 10 to 49 tons per acre.

Subitem O8 - Level VIII - Mop-up is required to be 100 percent completed in the unit or designated portion of unit within a 24-hour period. Post burn fuel loads range between 10 to 49 tons per acre.

Subitem O9 - Level IX - Mop-up is performed from November 1 thru April 30. Post burn fuel loads are greater than 50 tons per acre.

Subitem O10 - Level X - Mop-up is performed from May 1 thru June 30. Post burn fuel loads are greater than 50 tons per acre.

Subitem O11 - Level XI - Mop-up is performed from July 1 thru October 31. Post burn fuel loads are greater than 50 tons per acre.

Subitem O12 - Level XII - Mop-up is required to be 100 percent completed in the unit or designated portion of unit within a 24-hour period. Post burn fuel loads are greater than 50 tons per acre.

- C.5.16.3 Task orders for Subitems O1 thru O12 will be on a per-acre basis and will designate the unit(s), acreage, description of mop-up location, and time period for completion (Subitems O1- O12). Additional mop-up might include 100 percent of the unit, or extending the existing mop-up in a designated length. Time period for completion for Subitems O1-O3, O5-O7, O9-O1 will be designated either 48, 72, 96, 120, or 144 hours starting at 8:00 am on the day after acceptance of the task order by the Contractor. Timeframe needed to complete the mop-up will be determined by the availability of Contractor's crews for the unit(s). Patrol as required by C.5.15.6 shall continue throughout the time prescribed for additional mop-up.
- C.5.16.4 Completely extinguish all burning material within the designated mop-up area.
- C.5.16.5 Mechanical equipment used must keep soil disturbance to a minimum. Mechanical equipment can only be used on landing areas. Use anywhere in the unit other than landings must be approved in writing by the COR.
- C.5.16.6 Contractor shall not fell any reserved trees which may have fire in them without approval of the COR.
- C.5.16.7 The Contractor may use wetting agents, retardants, foam, or suppressants with written approval from COR during mop-up and ignition operations. Contractor is responsible for assuring these do not leak or spread into streams, water sources or standing water. Root wads (uprooted stumps with roots attached) shall be thoroughly extinguished (dug around and rotten or loose wood scraped off). Fireline berms shall be thoroughly extinguished.
- C.5.16.8 Unsafe logs and chunks with a minimum size of 12 inches x 4 feet up to a maximum of 20 inches x 8 feet on slopes greater than 50% shall be turned and placed in a manner that provides for safety in preventing this debris from rolling.
- C.5.16.9 Project Area Reburn - Should a reburn occur during the mop-up operation, suppress the fire and notify the Government immediately. The cost of reworking the area to contract requirements shall be borne by the Contractor.
- C.5.16.10 Mop-up contingencies are established and will be initiated by the COR for the following situation:

If a slopover occurs on a burn unit during mop-up and is declared an escaped fire by the COR, the Government will immediately assume control of the project area. Following declaration of the escaped situation, Contractor's personnel shall be made available to the

Government for fire suppression and will be paid at the applicable firefighting rates paid by the Government. See E.3.2.5.

C.5.17 Snag Felling - Subitem P

C.5.17.1 Snag felling in this item is for the objectives of human safety, and assist holding and mop-up operations by removing source of spotting and fire spread. Snag felling in this Item is separate from snag felling in Fuel Modification Zone, Items F and G.

C.5.17.2 Fell snags as specified by task order. Snags will generally range in size from 6 inches DBH to 40 inches DBH. It is estimated that snag felling will be required for not more than 40 trees. Stump height shall be as low as possible consistent with adequate safety considerations.

C.5.17.3 Snags shall be felled such that firelines remain free of debris. Restore firelines to original clear condition following snag felling.

C.5.18 Tractor Operations - Subitem Q1 and Lowboy Transport - Subitem Q2

C.5.18.1 Tractor operations under this Item shall include utilization of a tractor to crush vegetation, roadblock removal and restoration, and removal of soil or debris to allow mop-up of burning material that is buried.

C.5.18.2 Crushing of vegetation by tractor operation is done in all or portion of unit(s) to create fuel conditions that allow for safety of ignition personnel and create optimal fuel moisture and arrangement to meet prescribed fire objectives. This is typically accomplished in shrubfields. Tractor operations are conducted along the slope contour on slope percentages less than 35 percent. COR will issue written instructions regarding location, spacing, reserved areas, and access for each unit(s).

C.5.18.3 Roadblock construction, removal and restoration shall consist of the following:

- a. Restore vehicle access to specified units which may be inaccessible due to materials piled in road. A minimum of 10 feet in width shall be made passable for all project vehicles.
- b. Following acceptance of the unit(s) for which access has been restored, and within 5 days of receipt of the notice of unit acceptance from the COR, return the road to its original blocked condition to prevent vehicle passage on specified roads.

C.5.18.4 Mop-up of burning material utilizing a tractor is required when material is buried beyond reach utilizing hand tools. This usually, but not always, occurs under landings in timber

harvest units. Uncover the burning material to the extent that the material is fully accessible and available to be mopped-up.

C.5.18.5 Provide transport for the dozer to and from the general area of the work site. When many moves are required (as constructing a number of widely separated road blocks) and the distance between work sites prohibits walking the machine the Contractor shall be paid by the move (Subitem Q2).

C.5.19 Unit Holding and Standard Mop-up - Subitem R

C.5.19.1 The Government may by task order request the Contractor to provide total or partial holding assistance on units where ignition is conducted by the Government or a third party. Standard mop-up is included. See C.5.15.

C.5.19.2 Levels of Difficulty - Sixteen levels of difficulty for requested holding and mop-up will be determined based on the length of unit perimeter, the Behave calculated fire intensity level and rate of spread of the adjacent fuels. Fire intensity levels are as follows:

<u>Fire Intensity Level*</u>			
Level	Flame Length	Rate of Spread	Probability of Ignition
1	< 4 feet	0 to 20 chs/hr.	0 to 25%
2	4 to 8 feet	21 to 100 "	26 to 50%
3	8 to 12 feet	101 to 250 "	51 to 75%
4	> 12 feet	> 251 "	> 75%

* both flame length and rate of spread must be exceeded or decreased by one level to graduate to next fire intensity level. Probability of Ignition is used as the tie breaker.

Subitem R1. - Level I - Requested holding and mop-up at fire intensity level 1. Unit perimeter is < 160 chains.

Subitem R2 - Level II - Requested holding and mop-up at fire intensity level 1. Unit perimeter is 160 to 499 to chains.

Subitem R3 - Level III - Requested holding and mop-up at fire intensity level 1. Unit perimeter is 500 to 1299 chains.

Subitem R4 - Level IV - Requested holding and mop-up at fire intensity level 1. Unit perimeter is greater than 1300 chains.

Subitem R5 - Level V - Requested holding and mop-up at fire intensity level 2. Unit perimeter is < 160 chains.

Subitem R6 - Level VI - Requested holding and mop-up at fire intensity level 2. Unit perimeter is 160 to 499 to chains.

Subitem R7 - Level VII - Requested holding and mop-up at fire intensity level 2. Unit perimeter is 500 to 1299 chains.

Subitem R8 - Level VIII - Requested holding and mop-up at fire intensity level 2. Unit perimeter is greater than 1300 chains.

Subitem R9 - Level IX - Requested holding and mop-up at fire intensity level 3. Unit perimeter is < 160 chains.

Subitem R10 - Level X - Requested holding and mop-up at fire intensity level 3. Unit perimeter is 160 to 499 to chains.

Subitem R11 - Level XI - Requested holding and mop-up at fire intensity level 3. Unit perimeter is 500 to 1299 chains.

Subitem R12 - Level XII - Requested holding and mop-up at fire intensity level 3. Unit perimeter is greater than 1300 chains.

Subitem R13 - Level XIII - Requested holding and mop-up at fire intensity level 4. Unit perimeter is < 160 chains.

Subitem R14 - Level XIV - Requested holding and mop-up at fire intensity level 4. Unit perimeter is 160 to 499 to chains.

Subitem R15 - Level XV - Requested holding and mop-up at fire intensity level 4. Unit perimeter is 500 to 1299 chains.

Subitem R16 - Level XVI - Requested holding and mop-up at fire intensity level 4. Unit perimeter is greater than 1300 chains.

- C.5.19.3 Provide holding supervision and holding resources required to cover at a minimum the anticipated or as calculated (using on site conditions through the behave program) the line building rate that exceeds the rate of perimeter increase. The Burn Plan will list the type and number of ground resources (aircraft is not included). The TOM and the Contractor will agree on the type and number of holding resources for the unit. The holding calculation form attached (See Section J) will be used and signed by both the Contractor and the Government. The Contractor will assume full control of the unit for patrol and mop-up purposes at 0800 the day following ignition.

- C.5.19.4 All prescribed fire holding operations shall be initiated only when the Prescribed Fire Plan has been reviewed by the Contractor. All elements of the plan shall be followed unless a deviation has been approved in advance by the COR. The Contractor shall conduct a preburn crew briefing, as prepared in the plan.
- C.5.19.5 During ignition operations, the Contractor's holding crew supervisor shall maintain contact with the Government representative through the Government-furnished radio communication system or other mutually-agreed-upon communications system at all times.
- C.5.19.6 Conduct holding operations in accordance with the prescribed fire plan. Relocation of manpower and equipment may be required as ignition and burnout progresses. The Contractor's crew supervisor shall be responsible for recognizing the need for and making such relocations, dependent upon on-site weather and fire conditions.
- C.5.19.7 Extinguish any fire outside the fireline of the unit, or unit boundary, and promptly report this to the TOM when at the site or to the COR. A hand fireline shall be constructed completely around any fire or slopover outside the unit fireline using hand tools. The minimum shall be a fireline scraped to mineral soil 1 foot in width with all overhanging combustible material cleared for 3 feet on either side and 6 feet overhead. The Government will identify the fireline with colored plastic ribbon. Major control problems can occur during a period of frontal passage and strong wind conditions. Close attention to weather forecasts, securing and patrolling of previously burned units is common practice to eliminate any escaped fires.
- C.5.19.8 No felling of any reserved trees which may have fire in them without approval of the TOM.
- C.5.19.9 Mop-up shall be performed in accordance with C.5.15. The Contractor and the TOM shall develop a mop-up plan prior to assuming the unit for patrol and mop-up. The Contractor and the TOM shall review the plan daily to ensure validity of plan, adequacy of assigned resources and timely completion of work.
- C.5.19.10 The Government may retain a specific segment of the perimeter for holding and mop-up. These specific segments are of high interest to the Government. The Contractor will not be assigned or paid for these specific segments. In no situation will the specific segments be more than 25% of the total unit perimeter. Unit perimeter that has no threat of escape to adjacent areas/fuels will not be assigned to the Contractor, nor will the Contractor be paid for these line segments.
- C.5.20 Fire Preparedness Services, Subitem S
- C.5.20.1 During the performance period of [31] **June 15 through September 15**, Contractor's crew shall be available to perform fire preparedness activities. The period during which work will actually be performed will be dependent on fire season severity and will be

designated by the Government in a written task order(s). There is no guarantee of full time work for the entire performance period. Availability of Contractor's crew outside the performance period is optional and will become effective upon acceptance of a task order by the Contractor.

- C.5.20.2 Preparedness activities may include fuels management work such as slashing, lop and scatter, pruning, fuel modification zone construction and maintenance, hand piling and cover, preburn fireline construction and maintenance, fuels pullback, prescribed burning and mop-up, brushing roads and trails, and activities related to burned area rehabilitation and restoration. These activities may require the use of Contractor provided tools and equipment provided under Section J, Personal Protective Clothing and Equipment, Table 1.
- C.5.20.3 Upon dispatch or performance on a wildland fire, this contract will be superceded by the Northwest Interagency Crew Agreement or replacement national arrangement applicable to the Northwest Geographic Area. Occasionally, wildland firefighting services may be needed in other areas, including out of state, and the Contractor's crew may be dispatched to fires in those areas. Dispatch will be in accordance with established agency procedures. While under a current task order and during work hours, the Contractor shall be prepared to immediately respond to fire dispatches within the geographic area of the designated duty station identified in the task order. Response time for dispatch outside the geographic area where the contractor is notified that an overnight stay is likely shall be 2 hours after notification. During off duty hours, the Contractor's crew shall be available for dispatch within 2 hours notice. The Contractor's crew shall be prepared for length of fire assignments up to 14 days (excluding travel).
- C.5.20.4 The Contractor shall provide all services, supervision, equipment, supplies, transportation, and trained personnel necessary to meet the contract specifications. To insure continued safe, efficient service, the Government may provide transportation and issue accountable and durable property and consumable goods. The cost of all consumable goods will be deducted from payment to the Contractor. All accountable and durable property shall be returned to the Government.
- C.5.20.5 When assigned to preparedness activities, Contractor's performance will be evaluated on a daily basis to ensure that contract specifications are being met. Upon completion of each task order and upon completion of the contract, a written evaluation of Contractor's performance will be completed. Unsatisfactory performance may be grounds for contract termination.
- C.5.20.6 During the Preparedness Period as stated in C.5.20.1, Contractor shall ensure that all crew members arrive at the work site with the personal protective clothing and equipment listed in Section J, Personal Protective Clothing and Equipment. Contractor shall ensure the personal protective clothing and equipment is operable and maintained in good repair throughout the duration of any assignment. When assigned to firefighting duties all

personnel shall wear personal protective clothing, including boots, upon arrival at the incident. THERE WILL BE NO PERMANENT CLOTHING EXCHANGE ON INCIDENTS.

- C.5.20.7 Procedures for dispatch, length of assignment, crew transportation and travel, general requirements and definitions are located in Section J, Fire Suppression Requirements.

SECTION E - INSPECTION AND ACCEPTANCE

52.246-4 INSPECTION OF SERVICES - FIXED-PRICE (AUG 1996)

(a) Definitions. "Services," as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) If any of the services do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by reperformance, the Government may (1) require the Contractor to take necessary action to ensure that future performance conforms to contract requirements and (2) reduce the contract price to reflect the reduced value of the services performed.

(f) If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and charge to the Contractor any cost incurred by the Government that is directly related to the performance of such service or (2) terminate the contract for default.

E.1.0 QUALITY ASSURANCE PLAN/INSPECTION [32]

The Government will inspect completed units as a basis for acceptance and payments, and to provide recommendations to improve work quality while work is in progress. The Contractor is responsible for providing quality control to assure that work complies with requirements of contract specifications.

E.1.1 All work included in the contract specifications shall be subject to inspections by the Government at periodic intervals during the performance of this contract. Treatment

inspections are for the sole benefit of the Government and shall not release the Contractor of the responsibility of providing quality control measures to assure that the work strictly complies with the contract requirements.

E.1.2 Inspection for Wildfire Hazard Reduction Treatments - Subitems A, B, C, D, E, F, G and H

E.1.2.1 Inspections will be made on a series of 1/40th acre (18.625 feet radius) plots located at predetermined intervals across each work unit. Sufficient plots will be taken to obtain at least one percent sample of the work unit.

E.1.2.2 Each inspection plot will be subdivided into four (4) quadrants based on cardinal directions. Each quadrant will be evaluated for compliance with all contract specifications as stated in Section C that pertains to that individual treatment. If two (2) or more quadrants fail to comply, the plot will fail.

E.1.2.3 Work Quality Percentage

Work quality percentages are derived from data developed from inspection plots. The total number of satisfactory plots divided by the number of plots inspected determines the quality rate. This rate multiplied by 100 provides the work quality percentage.

Example:	Number of plots inspected	25
	Number of satisfactory plots	23
	23 divided by 25	.92
	Work Quality Percentage	92%

E.1.3 Prescribed Fire Plan Preparation - Broadcast Burn, Understory Burn, Swamper and Hand Pile Burn - Subitems I1 and I2

The portions of the Prescribed Fire Plan completed by the Contractor will be reviewed by the COR, TOM, Fuels Management Specialist and District Fire Management Officer. Each individual unit plan will be reviewed for completeness, adherence to the burn objectives, ignition and holding, escape contingency, mop-up plan, adequacy of workforce and equipment, and safety measures. Contractor will be notified of deficiencies and will be given two (2) working days to amend the plan.

E.1.4 Fireline Construction and Maintenance - Subitem J, Fuels Pullback - Subitems K

Inspections will be made by the Government using a visual examination of the constructed fireline and the fuels pullback for compliance with all terms and specifications within five (5) calendar days after notice that the work is completed. If the work does not meet contract

requirements, corrections shall be made within seven (7) calendar days. Along the constructed fireline for each project area the Government will:

- a. Identify existing deficiencies in the fireline construction and maintenance.
- b. Mark the beginning point and ending point of the deficient construction with plastic ribbon.

E.1.5 Prescribed Burn and Mop-up - Subitems L, M, N, Requested Holding/Mop-up - Subitem R, and Additional Mop-Up - Subitem O

E.1.5.1 The TOM or Project Inspector will be on site during burning operations (ignition and holding). The Contractor's activity will be monitored throughout the operation for compliance with the Prescribed Fire Plan and that Resource and Prescribed Fire Objectives are being met. Compliance with the Prescribed Fire Plan will be required unless concurrence is obtained from the COR prior to deviating from the plan. A Notice of Noncompliance or Suspend Work Order will be issued for all other deviations from the Prescribed Fire Plan.

E.1.5.2 The Government will inspect patrol and mop-up operations to determine compliance with the mop-up standards required for Subitems L, M, N and R for compliance with all specifications in C.5.15. The Government will inspect mop-up operations in Subitems O to determine compliance with all specifications in C.5.16.

E.1.5.3 100% inspection of the designated mop-up areas will be made by the Government either visually and/or with infrared-scan equipment to ensure that all burning material has been detected. The Contractor shall extinguish any burning material detected before final acceptance is made.

E.1.6 Snag Felling, Tractor Operations and Lowboy Transport - Subitems P1 and Q1 & Q2

Inspections will be made by visual examination of the snags felled, tractor operation accomplishments, and lowboy transport. The Contractor will be given two (2) working days to correct deficiencies. If the quality of work is not satisfactory, or snags are felled without authorization by the COR, the Contractor's right to proceed may be terminated.

E.2.0 ACCEPTANCE

E.2.1 Final acceptance of all items will be based upon satisfactory completion of the work in accordance with the specifications on a unit-by-unit basis for all items.

E.2.2 Wildfire Hazard Reduction Treatments - Subitems A, B, C, D, E, F, G and H

E.2.2.1 Acceptable Quality Level - Acceptance of work will be based on compliance with all Section C.5.0 Specific Tasks that correspond to the treatment. A minimum basic quality of 85 percent is required.

E.2.2.2 Unsatisfactory Work - If the work quality falls below 85 percent, the COR will immediately notify the Contractor in writing and direct the Contractor to improve the quality of his work. If the quality of work is not raised to an acceptable level within 5 working days after written notification, the Contracting Officer may issue a Suspend Work Order to resolve the problem, during which time contract performance time will continue to run. If untreated or unsatisfactory treated areas are the primary reason for unsatisfactory work, the area shall be reworked to obtain satisfactory work quality.

E.2.3 Prescribed Fire Plan Preparation - Subitems I1 and I2

When a Prescribed Fire Plan is reviewed and is acceptable, the Plan will be signed by the District Fire Management Officer or designated Acting Officer. The Plan is then sent to the Area Manager or designated Acting Manager and returned to the COR for signature. The COR's signature on the plan will constitute acceptance.

E.2.4 Fireline Construction and Maintenance - Subitem J, Fuels Pullback - Subitem K, Snag Felling - Subitem P1, Tractor Operations - Subitem Q1, Lowboy Transport - Subitem Q2

Acceptance will be based on the inspection results of the visual examination of the project area.

E.2.5 Prescribed Fire Operations - Subitems L, M, N, Requested Holding/Mop-up - Subitem R and Additional Mop-Up - Subitems O

E.2.5.1 Acceptance of the burning and mop-up will be made by the COR, if at least 85% of the prescribed fire objectives are met, and the Contractor is in compliance with the specifications for satisfactory holding, mop-up and patrol of the unit.

E.2.5.2 Acceptance will be based upon the results of an infra-red scan revealing no burning material, if requested by the contractor or the Government; or by visual inspection by the Government. Acceptance may occur at anytime, starting from 0800 hour on the day following ignition. Acceptance will be made in writing by the Government.

E.3.0 BASIS OF PAYMENT [33]

E.3.1 Method of Measurement

E.3.1.1 Slashing - Subitem A, Girdling - Subitem B, Lop and Scatter - Subitem C, Selective Slashing - Subitem D, Pruning - Subitem E, Fuel Modification Zone Construction Timber

Stand - Subitem F, Fuel Modification Zone Woodland/Shrubland - Subitem G, Hand Pile and Cover - Subitem H, Fuels Pullback - Subitem K, Prescribed Burn and Mop-up - Subitems L, M, and N, Additional Mop-Up - Subitems O

- a. Acreage are measured on the horizontal plane.
- b. The Contractor may, at any time during the course of the contract, request remeasurement of any project area if he feels that the acreage stated in the contract is incorrect. If remeasurement indicates that a variance of 5% or less exists, the Contractor will pay for the actual cost of the remeasurement. Under this condition, payment for the project area will be made on the acreage stated in the contract. If remeasurement indicates the actual variance is greater than 5%, payment for the project area will be based on the remeasured acreage.

E.3.1.2 Prescribed Fire Plan Preparation - Subitems I1 and I2

Prescribed Fire Plan preparation will not be measured separately for payment, but will be considered subsidiary to other items of work.

E.3.1.3 Fireline Construction and Maintenance - Subitem J

The quantities on the Schedule of Items are estimated. Fireline construction is measured along the slope to the nearest foot.

E.3.1.4 Requested Holding and Mop-up - Subitem R

The quantities on the Schedule of Items are estimated. Requested Holding and Mop-up is measured on the horizontal plane to the nearest chain.

E.3.1.5 Snag Felling - Subitem P1

The quantities on the Schedule of Items are estimated. Snag felling is measured on a team hourly basis of a 2-member team, beginning upon arrival at the unit, excluding lunch breaks, ending when work is completed. Time should be rounded up to the nearest quarter hour. Times shall be recorded and submitted by the Contractor, subject to verification by the COR based on spot checks of snag felling in operation.

E.3.1.6 Tractor Operations - Subitem Q1

The quantities on the Schedule of Items are estimated. Tractor operations is measured on an hourly basis, beginning upon arrival at the unit, excluding lunch breaks, ending when work is completed. Time should be rounded up to the nearest quarter hour. Times shall be

recorded and submitted by the Contractor, subject to verification by the COR based on spot checks of tractor in operation.

E.3.1.7 Lowboy Transport - Subitem Q2

The quantities on the Schedule of Items are estimated. Lowboy Transport operations are measured on the individual move basis.

E.3.2 Payment

E.3.2.1 Slashing - Subitem A, Girdling - Subitem B, Lop and Scatter - Subitem C, Selective Slashing - Subitem D, Pruning - Subitem E, Fuel Modification Zone Construction Timber Stands - Subitem F, Fuel Modification Zone Woodland/Shrubland - Subitem G, Hand Pile and Cover - Subitem H, Fuels Pullback - Subitem K, Prescribed Burn and Mop-up - Subitems L, M, and N, Additional Mop-Up - Subitems O

Upon acceptance, payment for work will be made at the level of difficulty on the Schedule of Items and at the unit price bid on a per acre basis for the acreage shown on the Schedule of Items. For units accepted which do not meet the minimum quality required in E.2.2.1, payment will be made at a unit price determined by multiplying the actual inspection percentage by the contract price.

E.3.2.2 Prescribed Fire Plan Preparation - Subitems I1 and I2

No separate payment will be made for prescribed fire plans. Payment will be considered subsidiary to other items of work.

E.3.2.3 Fireline Construction and Maintenance- Subitem J

The quantities on the Schedule of Items are estimated. Payment will be made at the level of difficulty identified on the Schedule of Items at the unit price bid on a per linear foot basis for the actual number of linear feet of fireline constructed, maintained and accepted. If requested by the Contractor, fireline construction which precedes the holding/mop-up phases by more than 10 calendar days will be paid for separately.

E.3.2.4 Requested Holding and Mop-up - Subitem R

The quantities on the Schedule of Items are estimated. Payment will be made at the level of difficulty identified on the Schedule of Items at the unit price bid on a per chain basis for the actual number of chains of unit perimeter held, mopped up, patrolled and accepted.

E.3.2.5 Snag Felling - Subitem P1, and Tractor Operations -Subitem Q1

The quantities on the Schedule of Items are estimated. Payment will be made at the unit price bid on an hourly basis for the actual number of hours of services ordered and provided.

E.3.2.6 Lowboy Transport -Subitem Q2

The quantities on the Schedule of Items are estimated. Payment will be made at the unit price bid on an individual move basis for the actual number of moves ordered and provided.

E.3.2.7 Additional Payment

a. Postburn

No additional payment will be made for fireline construction, holding, or mop-up on slopovers or spot fires when no declaration of wildland fire is made. Furthermore, no additional payment will be made for slopovers, spot fires, or escapes that occur when failure to follow the prescribed fire plan caused or contributed to the slopover, spot fire, or escape.

b. Wildland Fire Suppression When Prescribed Fire Plan Was Followed

1) The Contractor's crew will be paid for escaped fire suppression at the wage rates shown in the current edition of the U.S. Department of Agriculture Pay Plan for Emergency Firefighters, Western Area.

2) The Contractor will be paid for equipment used at the rates specified in Oregon/Washington Fire Fighting Equipment Rental Rates agreed upon by various Federal Agencies.

3) A copy of the above rates will be furnished upon request at the Lakeview Fire Office.

E.3.2.8 Timekeeping and Payment - Subitem S

E.3.2.8.1 Crew Strength Verification

Contractor and Government shall agree daily on actual crew strength, names of crew members assigned and time on shift. Government will supply a time recorder to monitor the actual number of team hours of service provided by Contractor, as documented on daily use records. When agreed upon, Contractor and Government shall each sign the Daily Time Report. A Government representative will provide evaluations of Contractor

performance to the Government timekeeper for inclusion with daily shift records and other data.

E.3.2.8.2 Payment

Payment will be made at the rate specified in the Schedule. No payment will be made for lunch breaks. When working under a task order for preparedness, payment will be reduced for each non-working crew member as follows:

- a. Five-person crew - 1/5th for each non-working crew member.
- b. Ten-person crew - 1/10th for each non-working crew member.
- c. Twenty-person crew - 1/20th for each non-working crew member.

SECTION F - DELIVERIES OR PERFORMANCE

- F.1.0 The Contractor shall begin work from the effective date of the Notice to Proceed and shall continue performance of the work under the contract without delay or interruption except for causes beyond his control as defined in the contract, or by the receipt of a "Suspend Work Order" issued by the Government. Failure to prosecute the work during prescribed burning conditions will be a basis for terminating the Contractor's right to proceed in accordance with the Default clause of the contract. However, when contractor crews and equipment are dispatched to a wildland fire or other emergencies through interagency dispatch procedures, contract time will be suspended for the duration of the emergency.
- F.2.0 Fireline construction shall be completed within 90 calendar days from effective date of the Notice to Proceed for each task order.
- F.3.0 All slashing shall be completed within 90 calendar days from the effective date of the Notice to Proceed for each task order.
- F.4.0 Task orders may be placed throughout the contract by the CO at the prices listed on the Schedule of Items. COs for agencies identified in Paragraph C.1.5 may also place orders. The CO will consider contractor proximity to project, contractor status as a small business, contractor's plan for providing employment and training opportunities to people in local rural communities, past performance and price, on this and previous contracts in determining placement of task orders. When past performance histories of awarded contractor are considered relatively close, price will be a major selection factor. The level of difficulty for each subitem of work ordered will be determined by the COR in accordance with the definitions in Section C. Performance time for each task order will be 365 calendar days from the date of the order provided that the units come into prescription, smoke management clearance is granted, and a decision is made by the Government to allow burning.

SECTION G - CONTRACT ADMINISTRATION DATA

G.1.0 CONTRACTING OFFICER'S REPRESENTATIVE DEFINITION

The "Contracting Officer's Representative (COR)" is the on-the-ground administrator for the Contracting Officer.

G.2.0 TASK ORDER MANAGER

"Task Order Manager (TOM)" means the person designated by the CO to perform, as needed, on-the-job Government inspection of work accomplished by the Contractor. The TOM also completes the Contractor Performance Profile in Section J after each task order, forwards it to the Contractor for Contractor Review, and provides it to the Task Order CO after receipt from the Contractor. Task Order CO then forwards a copy on to the Awarding CO.

G.3.0 RESPONSIBILITIES OF THE CONTRACTING OFFICER'S REPRESENTATIVE AND TASK ORDER MANAGER

G.3.1 The COR's authorities and responsibilities are defined in the COR's Designation Letter. The COR is authorized to clarify technical requirements, and to review and approve work which is clearly within the scope of work. He is NOT authorized to issue changes pursuant to the changes clause or to in any other way modify the scope of work.

G.3.2 The Task Order Manager is responsible for checking the Contractor's compliance with the technical specifications, drawings, work schedule, and labor provisions at the site of the work.

G.4.0 NOTICE TO PROCEED

G.4.1 After award of contract, the COR will issue to the Contractor a written notice to proceed. Issuance of the notice may be delayed for a reasonable time, at the discretion of the Government, if adverse soil, vegetative, or climatological conditions exist.

G.4.2 The Contractor shall perform no preliminary work prior to receipt of the written notice to proceed. Contract time starts on the effective date of the notice to proceed.

G.5.0 ELECTRONIC FUNDS TRANSFER PAYMENTS

Payment under this contract will be made by the Government by electronic funds transfer (through the Treasury Fedline Payment System (FEDLINE) or the Automated Clearing House (ACH)).

After award, but no later than 14 days before an invoice or contract financing request is submitted, the Contractor shall designate a financial institution for receipt of electronic funds transfer payments (SF-3881), and shall submit this designation to the following address:[34]

**Bureau of Land Management
Federal Business Center
Building 50, BC-630
P.O. Box 25047
Denver, CO 80225-0047**

If a designation has been submitted to the agency under a previous contract it is not necessary to complete another SF-3881 unless you are changing your designation of financial institution.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1.0 WORK HOURS

Work hours under this contract shall be limited to the time between one-half hour before sunrise to one-half hour after sunset each day. No work will be done on Sunday unless mutually agreed upon.

H.2.0 PROSECUTION OF THE WORK

H.2.1 The capacity of the Contractor's plant, method of operation, and forces employed shall, at all times during the continuance of the contract, be subject to the approval of the Contracting Officer and shall be such as to assure the completion of the work within the specified period of time. To the extent stated in the specifications, the Contracting Officer shall have the right to select the sequence in which the individual work will be completed.

H.2.2 If work is seriously or chronically deficient, the Contractor's right to proceed may be suspended until the performance problems can be resolved and work may resume. The contract time will continue to run during any such period of suspension.

H.3.0 ENVIRONMENTAL INTERRUPTION OF WORK

H.3.1 Environmental - The Contracting Officer, by issuance of a suspend work order, may direct the Contractor to shut down any work that may be subject to damage due to weather conditions or fire danger. The Contractor will be given a resume work order which will document the date the work suspension ends. An allowance has been included in the contract time for short term environmental delays up to one day at a time. The count of contract time will therefore continue during work interruptions of one day or less, but the count of contract time will stop during work interruptions in excess of one day at a time. All periods of interruptions directed by the Government will be documented. The Contractor will not be entitled to additional monetary compensation for such suspensions regardless of duration.

H.3.2 Endangered Species - The Government may direct the Contractor to discontinue all operations in the event that listed or proposed threatened or endangered plants or animals protected under the Endangered Species Act of 1973, as amended, or Federal candidate (Category 1 and 2), sensitive or state listed species, identified under [35] **BLM Manual 6840**, are discovered to be present in or adjacent to the project area. Actions taken under this paragraph shall be subject to the Suspension of Work clause in Section I, FAR 52.242-14.

H.4.0 PRESERVATION OF HISTORICAL AND ARCHEOLOGICAL RESOURCES

If, in connection with operations under this contract, the Contractor, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural value on the project area, such as historical or prehistorical ruins, graves or grave markers, fossils, or artifacts, the Contractor shall immediately suspend all operations in the vicinity of the cultural value and shall notify the COR in writing of the findings. No objects of cultural resource value may be removed. Operations may resume at the discovery site upon receipt of written instructions. Actions taken under this paragraph shall be subject to the Suspension of Work clause in Section I, FAR 52.242-14.

H.5.0 SUBCONTRACTS

If the contractor desires to subcontract any work under the contract, it shall obtain the Contracting Officer's written consent. The request to subcontract shall contain the following information:

- (a) Name of subcontractor
- (b) Description and amount of supplies or services to be subcontracted. The Contractor shall insert in any subcontracts all applicable clauses contained in the contract.

H.6.0 RESTORATION OF RESOURCES

H.6.1 Cleanup - The Contractor is responsible for cleaning up all camp and worksites before leaving the area. Final payment may be withheld until the Contractor has complied with this requirement.

H.6.2 Access Roads - Public or private access roads damaged by the Contractor shall be restored, at his expense, to the same condition they were in at the commencement of work.

H.7.0 FIRE DANGER SEASON

If the COR allows the Contractor to continue work during periods of Closed Fire Season, the Contractor shall comply with all applicable State laws relating to fire prevention and with all special conditions of work as directed by the COR.

H.8.0 UNDOCUMENTED WORKERS

This contract involves the employment of unskilled labor working under arduous field conditions. Such employment may be attractive to persons coming from foreign countries, sometimes illegally. Bidders are reminded that it is a crime to bring into the United States, transport within the United States, and to harbor aliens who do not have a proper visa for

entry and working in this country (8 U.S.C. § 1323-1325). If violations are suspected by the COR during the performance of work on this (these) project(s) they will be reported to the U.S. Immigration and Naturalization Service for investigation and appropriate action. Conviction of the Contractor for commission of a criminal offense referred to herein will be deemed sufficient cause for default and the initiation of debarment or suspension proceedings to prevent the Contractor from receiving future Government contracts.

H.9.0 MIGRANT SEASONAL AGRICULTURAL WORKERS PROTECTION ACT REGISTRATION

H.9.1 As set forth in Title 29, Part 500 of the Code of Federal Regulations, Migrant and Seasonal Agricultural Worker Protection, the Contractor shall maintain all necessary U.S. Department of Labor registrations during the performance period of this contract. Failure to maintain a valid registration is grounds for termination of this contract.

H.9.2 In compliance with the Migrant and Seasonal Agricultural Worker Protection Act, the Contractor shall provide the following to meet minimum safety and health standards for housing employees when camping on Federal lands:

- a. A shelter to provide protection from the elements. Where heat adequate for weather conditions is not provided, other arrangements should be made to protect the workers from the cold.
- b. Sanitary facilities for storing food. Ice chests or coolers, with ice supply made from potable water replenished as necessary, to meet the requirement for storage of perishable food items.
- c. An adequate and convenient potable water supply, approved by the appropriate health authority, in each camp for drinking and cooking purposes. As an alternative, commercial bottled water may be used.
- d. Toilet and hand washing facilities adequate for the capacity of the camp, at not less than a 1:15 ratio, supplied with adequate toilet paper. Such facilities shall be maintained in a sanitary condition.
- e. Fly-tight, rodent-tight, impervious, cleanable or single service containers to be used for the storage of garbage. Such containers shall be kept clean and emptied when full.
- f. Basic first aid supplies under the charge of a person trained to administer first aid.
- g. A laundry tray or tub for every 30 workers, or transportation, at least weekly, to a commercial laundromat for all workers.

H.10.0 [36] OREGON FARM/FOREST LABOR CONTRACTOR'S LICENSE

If the State of Oregon requires an Oregon Farm/Forest Labor Contractor's License, then the contractor awarded this contract and all first-tier subcontractors shall be required to obtain and maintain, during the term of this contract, such a license. Contractors not having a current license will be required to furnish evidence of having obtained such license within ten (10) days after receipt of written notification of contract award. Failure to obtain, keep and maintain a current license during the term of this contract or the extension thereof shall be a basis for termination for default.

Information on obtaining this license may be obtained from:

Bureau of Labor and Industries
Wage and Hour Division
800 NE Oregon, #32, Suite 1160
Portland, Oregon 97232

Contact: Licensing Unit
Telephone: (503) 731-4074

H.11.0 IMPROPER DISPOSAL OF GOVERNMENT-FURNISHED MATERIAL

H.11.1 Improper disposal includes, but is not limited to, the wrongful ditching, hiding or burying of Government-furnished material (GFM). The Government may, by issuance of a written order, suspend the Contractor's right to proceed for improper disposal of GFM. The Contractor may be required to remove from the contract site any individuals involved in the improper disposal of GFM.

H.11.2 The Contractor will be charged for the actual costs of the improperly disposed GFM. The costs will be based on the current market value and any associated costs.

H.12.0 KEY PERSONNEL

The personnel specified in the Contractor's offer are considered to be essential to the work being performed. Prior to diverting any of the specified individuals from this program, the Contractor shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the program. No diversion shall be made by the Contractor without the written consent of the Contracting Officer.

H.13.0 PROSECUTION OF WORK

The capacity of the Contractor's plant, method of operation, and forces employed shall, at all times during the continuance of the contract, be subject to the approval of the Contracting Officer and shall be such as to assure the completion of the work within the specified period of time. To the extent stated in specifications, the Contracting Officer shall have the right to select the sequence of work to be completed under the contract.

H.14.0 [37] TASK ORDER OMBUDSMAN

The task order contract ombudsman for this contract is: **Chief of the Contracting Office, BLM Oregon State Office**. In accordance with FAR 16.505(b)(4), the ombudsman shall review complaints from contractors regarding contracts awarded under Solicitation Number **1422H952-R98-2038, Fuels Management Services**. Failure of an agency to follow ombudsman advice may result in termination of the agency's authority to place orders.

SECTION I - NEGOTIATED SERVICE CLAUSES

(current through Federal Acquisition Circular 97-22)

*** Asterisked clauses are included in full text.**

52.202-1	Definitions	(MAR 2001)
52.203-3	Gratuities	(APR 1984)
52.203-5	Covenant Against Contingent Fees	(APR 1984)
52.203-6	Restrictions on Subcontractor Sales to the Government	(JUL 1995)
52.203-7	Anti-Kickback Procedures	(JUL 1995)
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	(JAN 1997)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	(JAN 1997)
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (Applicable to contracts exceeding \$100,000)	(JUN 1997)
52.204-4	Printed or Copied Double-Sided on Recycled Paper	(AUG 2000)
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	(JUL 1995)
52.215-2	Audit and Records - Negotiation	(JUN 1999)
52.215-8	Order of Precedence	(OCT 1997)
52.215-10	Price Reduction for Defective Cost or Pricing Data.	(OCT 1997)
52.215-11	Price Reduction for Defective Cost or Pricing Data - Modifications	(OCT 1997)
52.215-12	Subcontractor Cost or Pricing Data	(OCT 1997)
52.215-13	Subcontractor Cost or Pricing Data - Modifications	(OCT 1997)
52.215-15	Pension Adjustments and Asset Reversions	(DEC 1998)
52.215-16	Facilities Capital Cost of Money	(OCT 1997)
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits Other Than Pensions	(OCT 1997)
52.216-18*	Ordering	(OCT 1995)
52.216-19*	Order Limitations	(OCT 1995)
52.216-22	Indefinite Quantity	(OCT 1995)
52.219-6	Notice of Total Small Business Set-Aside (Applicable if so noted on Schedule of Items.)	(JUL 1996)
52.219-8	Utilization of Small Business Concerns	(OCT 2000)
52.219-14	Limitations on Subcontracting (Applicable only if project is set aside for small businesses.)	(DEC 1996)
52.222-3	Convict Labor	(AUG 1996)
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation	(SEP 2000)
52.222-21	Prohibition of Segregated Facilities	(FEB 1999)
52.222-26	Equal Opportunity	(FEB 1999)

52.222-35	Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era	(APR 1998)
52.222-36	Affirmative Action for Workers with Disabilities	(JUN 1998)
52.222-37	Employment Reports on Disabled Veterans and Veterans of the Vietnam Era	(JAN 1999)
52.222-41	Service Contract Act of 1965, as Amended	(MAY 1989)
52.222-42*	Statement of Equivalent Rates for Federal Hires	(MAY 1989)
52.222-44	Fair Labor Standards Act and Service Contract Act-Price Adjustment	(MAY 1989)
52.223-6	Drug-Free Workplace	(MAR 2001)
52.223-14	Toxic Chemical Release Reporting (Applicable if contract exceeds \$100,000.)	(OCT 1996)
52.225-1	Buy American Act - Balance of Payments Program - Supplies	(FEB 2000)
52.225-13	Restrictions on Certain Foreign Purchases	(JUL 2000)
52.227-1	Authorization and Consent	(JUL 1995)
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement	(AUG 1996)
52.228-1	Bid Guarantee (SEP 1996) (Applicable if guarantees required. See Schedule of Items.)	
52.228-2	Additional Bond Security (Applicable if bonds required. See Schedule of Items.)	(OCT 1997)
52.228-5	Insurance-Work on a Government Installation (JAN 1997) (Applicable if DIAR 1452.228-70 is included.)	
52.228-11	Pledges of Assets (Applicable if bonds required. See Schedule of Items.)	(FEB 1992)
52.228-14	Irrevocable Letter of Credit (Applicable if bonds required. See Schedule of Items.)	(DEC 1999)
52.229-3	Federal, State, and Local Taxes	(JAN 1991)
52.229-4	Federal, State, and Local Taxes (Noncompetitive Contract)	(JAN 1991)
52.229-5	Taxes - Contracts Performed in U.S. Possessions or Puerto Rico (APR 1984)	
52.232-1	Payments	(APR 1984)
52.232-8	Discounts for Prompt Payment (MAY 1997)	
52.232-9	Limitation on Withholding of Payments	(APR 1984)
52.232-11	Extras	(APR 1984)
52.232-17	Interest	(JUN 1996)
52.232-23	Assignment of Claims	(JAN 1986)
52.232-25	Prompt Payment	(MAR 2001)
52.232-34	Payment by Electronic Funds Transfer - Other Than Central Contractor Registration	(MAY 1999)
52.233-1	Disputes -- Alternate I (DEC 1991)	(DEC 1998)

52.233-3	Protest After Award	(AUG 1996)
52.236-6	Superintendence by the Contractor	(APR 1984)
52.236-7	Permits and Responsibilities	(NOV 1991)
52.242-13	Bankruptcy	(JUL 1995)
52.242-14	Suspension of Work	(APR 1984)
52.243-1	Changes - Fixed-Price (AUG 1987) -- Alternate I	(APR 1984)
52.244-6	Subcontracts for Commercial Items and Commercial Components	(MAR 2001)
52.245-4	Government-Furnished Property (Short Form)	(APR 1984)
52.246-25	Limitation of Liability - Services	(FEB 1997)
52.248-1	Value Engineering	(FEB 2000)
52.249-4	Termination for Convenience of the Government (Services) (Short form)	(APR 1984)
52.249-8	Default (Fixed-Price Supply and Service)	(APR 1984)
52.252-2*	Clauses Incorporated by Reference	(FEB 1998)
52.253-1	Computer Generated Forms	(JAN 1991)
1452.203-70	Restriction on Endorsements - Department of the Interior	(JUL 1996)
1452.228-70*	Liability Insurance -- Department of Interior	(JUL 1996) [38]

52.216-18 ORDERING (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from date of award through [39] **September 30, 2003.**

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

52.216-19 ORDER LIMITATIONS (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than [40] \$ 15,000.00, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor-

- (1) Any order for single item in excess of \$ (See Schedule);
- (2) Any order for a combination of items in excess of \$ (See Schedule);
- (3) A series of orders from the same ordering office within 30 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) above (N/A—see Schedule).

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.

(d) Notwithstanding paragraphs (b) and (c) above, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b) unless that order (or orders) is returned to the ordering office within seven (7) days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

52.222-42 STATEMENT OF EQUIVALENT RATES FOR (MAY 1989) FEDERAL HIRES

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This Statement is for Information Only: It is Not a Wage Determination

Employee class	Monetary wage-Fringe benefits
(See Section J)	(See Section J)

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address: www.arnet.gov/far

1452.228-70 LIABILITY INSURANCE -- DEPARTMENT OF INTERIOR (JUL 1996) [38]

(a) The contractor shall procure and maintain during the term of this contract and any extension thereof liability insurance in form satisfactory to the Contracting Officer by an insurance company which is acceptable to the Contracting Officer. The named insured parties under the policy shall be the Contractor and the United States of America. The amounts of the insurance shall be not less than as follows:

\$300,000 each person

\$300,000 each occurrence

\$300,000 property damage

(b) Each policy shall have a certificate evidencing the insurance coverage. The insurance company shall provide an endorsement to notify the Contracting Officer 30 days prior to the effective date of cancellation or termination of the policy or certificate; or modification of the policy or certificate which may adversely affect the interest of the Government in such insurance. The certificate shall identify the contract number, the name and address of the Contracting Officer, as well as the insured, the policy number and a brief description of contract services to be performed. The contractor shall furnish the Contracting Officer with a copy of an acceptable insurance certificate prior to beginning the work.

SECTION J - LIST OF ATTACHMENTS

<u>Attachment</u>	<u>No. of Pages</u>
Noncomplex Prescribed Burn Plan	4
Prescribed Fire Plan Checklist	1
Example of Prescribed Fire Plan	23
Narrative for evaluation Prescribed Fire Plan - Weber Road [41]	3
Project and vicinity maps for Weber Road Prescribed Burn	2
Sample Task Order [42]	2
Project maps for sample task order	15
Holding Force Calculation Worksheet Form	2
Daily Mop-up Shift Plan	1
Contractor Performance Profile	2
Statement of Classification and Wages of Government Employees	1
Wage Determination and Fringe Benefits	7
Fire Requirements Procedures Outline	2
Personnel Protective Clothing and Equipment	2
Required Training and Experience	3
Fire Suppression Requirements	5

NONCOMPLEX PRESCRIBED BURN PLAN

BUREAU OF LAND MANAGEMENT

LAKEVIEW DISTRICT [43]

Oregon

*

_____ OR01_ * Prepared By _____
Project / Burning Area _____ * Reviewed By _____ Est. Cost / Acre _____
Recommended By _____
Benefitting Activity _____ * Approved By _____

The approved Prescribed Fire Plan constitutes the authority to burn. No one has the authority to burn without an approved plan or in a manner not in compliance with the approved plan. Actions taken in compliance with approved plan will be fully supported. Personnel will be held accountable for actions taken which are not in compliance with elements of the plan regarding execution of the objectives in a safe and cost effective manner. This project is rated noncomplex pursuant to prescribed fire guidelines.

BURN AREA DESCRIPTION

Legal Description T__S,R__E,S__ Klamath/Lake County, Elevation_____

Aspect__ Drainage_____ Acres__ EA# OR010_____

Timber Sale# OR014 TS__-__ JDR#_____

OBJECTIVES (Resource) To enhance: Planting, Hazard Reduction, Brush Control, Trespass Cleanup, Other_____

(Fire) _____ Consume material to the fullest extent without damaging the _____ resources present at the site. Plan on a 90% reduction.(Tolerable Deviation of Objectives) 50%

FUELS DESCRIPTION [Windrows] [Tractor Piles] [Hand Piles] [Jack Pot]

Number_____ #/Acre_____

Average Size__ x __ Weight__/Pile

% of Pile in >3" Material__ % of Area Covered by Jack Pot Material__

ADJACENT FUELS? Photo Series Book_____ Page_____ Est. Wt._____

WEATHER AND FUEL PARAMETERS

Low	High	Desired	Low	High	Desired
Temperature__	__	__	Relative Humidity__	__	__
Wind Speed__	__	__	Wind Direction__	__	__
Slope__	__	__			
Live Mos. __	__	__	1 Hr Moisture__	__	__
Woody Mos. __	__	__	10 Hr Moisture__	__	__
Duff Mos. __	__	__	100 Hr Moisture__	__	__
Soil Mos. __	__	__	1000 Hr Moisture__	__	__
Narrative Forecast_____					

PREDICTED FIRE BEHAVIOR

Fire Behavior Narrative_____ fire behavior cont.

Target Fuel			Adjacent Fuel		
Low	High	Desired	Low	High	Critical

Fuel Model_____ within project area _____ outside project
Rate of Spread _____
Heat/Unit Area _____ Spotting Max___ Min____
Fireline Intensity_____ _____
Flame Length _____
Ignition Component_____ _____
Reaction Intensity_____ _____
Scorch Ht.? _____ Parameter@ 1Hr___ Area@ 1Hr___

SMOKE MANAGEMENT

Predicted Reportable T/A_____ Distance to Sensitive Area_____miles
Required Wind Vectors (azimuths) _____ to _____
Visibility Hazards_____
Special Concerns/Constraints_____

Items To Do: [Prior] [During] [after] check box when completed [x]

Ignition Scheduling***SEASON fall ☐ winter ☐ spring ☐ summer! ☐

Narrative of Typical Day_____

Describe Ignition Methods_____

Are There Holding Problems _____

*****The need to wear nomex is dependent on intensity of fire behavior*****

Under typical conditions; Hard Hat, Warm Coat (wool etc.), Goggles, Gloves, Pac Boots, Rain Gear, Hot Coffee, BIG Lunch. !!!PROTECT HEAD-EYES-HANDS-FEET!!!!

SAFETY FIRST, briefing_____

Water Sources_____

Mop-up_____

Dozer ☐ Pumper ☐ Drip Torches # _____ Personnel # _____

Special Personnel or Equipment Needs_____

attach burn boss report, area map, daily cost summary, record of weather

BURN BOSS REPORT

Lakeview District Bureau Of Land Management

BURN UNIT_____ JDR or TS#_____ Date_____Time_____
Type of burn: piles ☐ underburn ☐ broadcast ☐ (timber, range, wildlife)
Burn boss_____ Lighting boss_____ Holding boss_____
radio freq.#_____ on site / dispatch #_____ acres burned_____
T_____S R_____E Sec._____ ignition method_____ignition duration_____

GO/NO GO CHECKLIST 1) are all fire prescription specifications met? ☐
2) are all smoke management prescriptions specs. met? ☐ 3) is the fire weather
forecast favorable? ☐ 4) has smoke management clearance been given for the
project? ☐ 5) are all personnel required in the prescribed fire plan on-site?
☐ 6) have all personnel been briefed on the requirements of the prescribed fire
plan? ☐ 7) have all personnel been briefed on the safety hazards, escape routes
and safety zones? (briefing on reverse side) ☐ 8) is all required equipment
in place and functional? ☐ 9) are available and back-up resources adequate for
containment of escapes under worst-case conditions? ☐ 10) in your opinion, can
the burn be carried out according to plan and will it meet the planned
objectives? ☐ 11) are answers to all of the above questions "YES"?
signed_____date_____

Weather on site? ☐ RAWS? ☐ Temp._____ R.H._____ Wind Speed_____ Direction_____
1 HR_____% 10 HR_____% 100 HR_____% 1000 HR_____% Live_____% Soil_____% Duff_____%
1000 HR method_____ months of drying_____

RESULTS fuels after burning: 1 HR_____ / 10 HR_____ / 100 HR_____ / 1000 HR_____% T/A
duff depth_____" / %bare ground_____% / % area burned_____% / avg.scorch ht._____'

ACHIEVEMENT OF PRESCRIBED FIRE RESULTS

short term objectives

results

Burn Boss Comments (ie, fire behavior, personnel and equipment performance etc.)

Cost Code_____-____ Total Work Hours BLM_____ Other_____ Cost/ac._____

SMOKE MONITORING Obs. Time begin_____ end_____ ground ☐ _____ / air ☐

elevation_____ Obs. Point_____ Documentation video ☐ photo ☐

Inversion? yes☐ no☐ inv. top elev._____ time of break up _____

Comments on Smoke:

Signature_____

NARRATIVE FOR EVALUATION PRESCRIBED BURN

WEBER ROAD

Attached is the Burn Area Description for the Weber Road Prescribed Fire Project. It includes the management and prescribed fire objectives. A map of the project area and a vicinity map is included to assist in a field reconnaissance. Additional information is included below.

The area has active Bald Eagles which restrict the burn to the fall. Dwellings exist along the north and northeast boundaries of the project. Residual smoke will require a tight prescription for avoiding impacts to Klamath Falls, Oregon. The project is very visible, and close to the urban area.

Describe in detail in the Prescribed Fire Plan how you will deal with these issues and include a step by step narrative of how you would proceed with planning, layout and execution of this project.

SAMPLE TASK ORDER [42]

To: Successful Offeror

From: Bureau of Land Mgmt. (952)
Branch of Procurement Mgmt.
P.O. Box 2695
Portland, Oregon 97208

Contract No: HAC01-
Item Number(s) 1-5

Requesting Office: Lakeview DO, KFRA
Task Order No: T001
Task Order Date: 8/1/98

Sub Item	Description/Project Area Name/Location	Est. Qty.	Unit	Unit Price	Total Amount
1.	<u>Upper Swan T37S-R10E-S11, 13, 14</u>				
	1I1 Presc. Fire Plan, Burn & Mop-up	1	EA	Not Separately Priced	
	1J1 Fireline Construction	16500	FT	\$_____	\$_____
	1J4 Fireline Construction	8300	FT	\$_____	\$_____
	1M9 Prescribed Burning	210	AC	\$_____	\$_____

2. Rattlesnake Lines T37, 38S-R 11 1/2W-S31,32/ 4,5,9,18,21,22

2J3	Fireline Construction	37500	FT	\$_____	\$_____
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3. Gerber BEMA T39S-R14E-19, 20,29,30

3A1	Slashing	196	AC	\$_____	\$_____
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* Sever all trees 1 to 6 inches that are located within a 60-foot (approximately 1/4 acre) radius of Ponderosa Pine 16 inches or greater in DBH.

3B2	Girdling	196	AC	\$_____	\$_____
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* Reserve Ponderosa Pine 6 inches and greater. Girdle all other stems between 6 and 16 inches within a 60-foot radius of Ponderosa Pine 16 inches or greater DBH, using method described in C.5.2.2.a.

4. Stukel Fire lines T39 & 40S-R10 & 11 1/2E Several Sections

4J3 Fireline Construction	76560 FT	\$_____	\$_____
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5. Timber Hill #3 Fire lines T40 & 41S-R15E-Several Sections

5J1 Fireline Construction	33264 FT	\$_____	\$_____
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5J3 Fireline Construction	51216 FT	\$_____	\$_____
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Total Task Order No. T001	\$_____
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PERFORMANCE TIME: 365 calendar days from the date of the task order.

ESTIMATED START WORK DATE: August 1, 2001

Accounting and Appropriation Data:

Name and Title of Signer

Name of Ordering Officer

Contractor's Signature Date

Ordering Officer's Signature Date

FIRE REQUIREMENTS PROCEDURES OUTLINE

This outline covers the fire protection requirements of a contractor or private party who performs service or construction contracts on Government land. In western Oregon, the BLM allows Oregon Forest Law (ORS) and Oregon Administrative Rules (OAR) to apply to these operations on Government lands rather than develop similar rules applicable only to Government lands.

1. CLOSED FIRE SEASON

The closed fire season means that fire season has been declared. ORS 477.505 gives the State Forester the authority to establish the fire season. The authority has been delegated to the District Foresters around the state who issue public notices through the newspapers and radio when fire season will be closed for their individual districts. Closed fire season depends upon the drying of forest fuels, rainfall, and time of year. During the closed fire season, the following requirements must be met:

- Ⓒ Fire tools must be on site;
- Ⓒ Fire extinguisher must be in all vehicles;
- Ⓒ Chainsaws must have a .023-inch mesh screen installed in the exhaust;
- Ⓒ Only unmodified saws are to be used in the forest;
- Ⓒ Approved spark arresters must be on all internal combustion engines;
- Ⓒ Watchman service must be provided for 3 hrs after shutdown of power equipment for the day;
- Ⓒ No smoking is permitted while working or traveling through any operations area in the forest;
- Ⓒ No use of explosives is permitted unless approved by the State Forester's representative;
- Ⓒ Permits to burn are required unless waived by a representative of the State Forester.

Changes or modifications to the above requirements are possible depending upon changes in State of Oregon law and requirements of the State Districts and Protective Associations.

2. FIRE PRECAUTION LEVELS

There are 4 fire precaution levels that begin with level 1 at the start of the closed fire season and can go through level 4 if conditions warrant. The fire precaution levels restrict certain forest operations as the fire danger increases. It is the responsibility of the individual operating on forest land to know the precaution level for the day and take the correct fire precautions. There are no precaution levels prior to the closed fire season. Each fire precaution level requires adherence to the restrictions applicable to all lower levels in addition to the limits placed by that level.

Level 1 is the lowest level of fire danger usually occurring early in the season and perhaps again after significant rainfall during the season. All requirements listed above apply. Waivers may be issued by the State Districts or Protective Associations and these MUST be approved by the BLM. Waivers will only be considered if the conditions on the work site are not as severe as predicted. The requirements for fire tools on site, screens installed in saws, and fire extinguishers with saws will not be waived.

Level 2 is the partial hootowl where saws can operate from first light in the morning until 1:00 p.m. in the afternoon. From 1:00 p.m. until the end of the day saws are to be shut down. Waivers for operating beyond the 1:00 p.m. shutdown will be evaluated on a site-by-site basis.

Level 3 is the partial shutdown of all forest industrial operations and shuts down contractor operations with few exceptions. Waivers may be issued on a site-by-site basis.

Level 4 is the general shutdown of all contractor operations. Waivers will not be issued. Landowners are permitted entry into their lands.

ORS. 477.066 requires that an operator on forest land take immediate action to control and extinguish a fire on forest land. The contractor shall take this action and notify the BLM and the nearest State of Oregon District office immediately.

OAR. 629-43-030 requires watchmen to be:

- Ⓒ Physically capable and experienced in operating any firefighting equipment on site.
- Ⓒ On duty for 3 hours after the shutdown of the last power-driven equipment for the day.
- Ⓒ Furnished adequate facilities for transportation and communications in order to summon assistance if needed.
- Ⓒ Patrolling and visually inspecting all sites where work was done during the day.

3. FIRE TOOLS REQUIRED DURING CLOSED FIRE SEASON

The operator/contractor shall furnish fire tools to all personnel on site using the following combinations.

KIND OF TOOLS	NUMBER OF PERSONNEL										
	1- 4	5	6	7	8	9	10	11	12	13	14
	NUMBER OF TOOLS REQUIRED										
Pulaskis	1	1	1	1	1	1	2	2	2	2	2
Shovels	2	2	2	3	3	3	3	4	4	5	5
Hazel hoes	1	2	3	3	4	5	5	5	6	6	6

In addition to the above handtools, the operator/contractor must provide a backpack pump can filled with water located with the tool box in a readily available area.

All shovels are to be size 0 or larger, long handled. All tools shall be sharp and ready for service. Fire extinguishers as follows:

- Ⓒ For chainsaws - 8 oz. capacity by weight.
- Ⓒ For vehicles - UL rating of at least 4 BC.

PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT

Clothing:

Boots. Leather, lace-up type, minimum of 8" high with lug type sole in good condition (steel toed boots are not acceptable).

Hard Hat. Plastic, class B ANSI Z89.1 1986, OSHA approved, with chin strap, NFPA Standard 1977, 1998 Edition.

Gloves. One pair per person (leather).

Goggles. One pair per person.

Head Lamp. With batteries and attachment for hard hat.

Canteen. One-quart size, one per person required, two per person recommended. Must be full upon arrival to fire.

Fire Shelter. National Fire Protection Association (NFPA) approved.

Flame Resistant Clothing (Shirt and Pants). Two full sets of flame resistant shirt and pants for every crew member plus one additional full set of flame resistant shirt and pants for every two crew members.

For routine fire line duties, flame resistant clothing must:

- a. Self-extinguish upon removal from a heat source.
- b. Act as an effective thermal barrier by minimizing conductive heat transfer.
- c. Not melt or shrink to any appreciable degree upon decomposition during exposure to a high heat source.
- d. Be manufactured from flame retardant treated (FRT) cotton, rayon, wool, aramid (nomex) or other similar fabric.
- e. Chain Saw Chaps (Power saw operators only). All employees who operate power chain saws shall wear serviceable protective chaps to protect the legs from the thigh to below the knee from injury due to inadvertent and accidental contact with a moving power saw chain.

Equipment

The tools shall be serviceable, in good condition, and meet the following minimum standards.

TABLE 1

HAND TOOLS			TOOL COMBINATION REQUIRED		
			5 PERSON CREW	10 PERSON CREW	20 PERSON CREW
HAZEL HOE	3 LB. HEAD	36"HANDLE	02	04	08
PULASKI	3¾ LB. HEAD	36"HANDLE	03	05	10
SHOVEL	SIZE 0 ROUND PT		02	04	08
POWER SAW	W/GAS & OIL FOR FIRST SHIFT WORK		01	02	03
10-PERSON BELT 1 st AID KIT			01	01	02

For each 20-person crew, CONTRACTOR shall have as a minimum, three (3) programmable hand held radios with one programming cable per crew to facilitate in the communications between overhead personnel and crew. Radio must be Bendix King or Kenwood capable of communicating within a frequency range from 150 MHZ to 174 MHZ on established federal and State frequencies.

For each 10-person crew, CONTRACTOR shall have as a minimum, two (2) programmable hand held radios with one programming cable per crew to facilitate in the communications between overhead personnel and crew. Radio must be Bendix King or Kenwood capable of communicating within a frequency range from 150 MHZ to 174 MHZ on established federal and State frequencies.

For each 5-person crew, CONTRACTOR shall have as a minimum, one (1) programmable hand held radio with one programming cable per crew to facilitate in the communications between overhead personnel and crew. Radio must be Bendix King or Kenwood capable of communicating within a frequency range from 150 MHZ to 174 MHZ on established federal and State frequencies.

CONTRACTOR shall comply with all National Telecommunications and Information Administration (NTIA) rules and regulations on all Federal Agency work projects and incidents

and with all Federal Communications Commission (FCC) rules and regulations on State Agency incidents.

REQUIRED TRAINING AND EXPERIENCE

Personnel Qualifications

The following qualifications will be used as a minimum requirement for all contract crew personnel. For purpose of this contract three positions are recognized: Single Resource Crew Boss (CRWB), Firefighter Type 1 (FFT1), and Firefighter Type 2 (FFT-2) (see Exhibit I, **Northwest Interagency Crew Agreement**). Advanced Firefighter/Squad Boss (FFT1) is included in Exhibit I because it is required in the progression of qualifications from FFT2 to CRWB.

Training and Experience

- a. Contractor's employees shall have met the training and experience requirements as shown in Exhibit I for the position they are performing when assigned.
- b. The Government reserves the right to reject any personnel who are not in full compliance with these specifications including Exhibit I. Further, if any member of the contract crew does not demonstrate an ability to perform the tasks as listed in the Position Task Book (PTB) for their position in Exhibit I, that deficient performance may be cause for immediate release.
- c. Contract Single Resource Crew Bosses (CRWB) and Firefighter Type 1 and 2 shall meet the training and experience requirements and the performance tasks in PMS 311-13 PTB for Single Resource Boss and Firefighter Type 1 and 2.
- d. In addition to the training requirements for the CRWB and FFT-2 positions listed in Exhibit I, Contractor shall ensure that all returning certified employees receive annually, "Standards for Survival," and "Your Fire Shelter" (1995 Pamphlet and Video) refresher courses. Contractor shall maintain records validating that the employee has received this additional training.
- e. Contractor shall ensure that all training received by their employees meets the course content and instructor standards listed in PMS 907. The training shall have been accomplished by an instructor who has been designated or approved by a recognized national or local Contractor association or Government approved educational institution. These associations or educational institutions must have a current Memorandum of Understanding with the Pacific Northwest Wildfire Coordination Group (PNWCG)) that they will meet the course content and instructor standards listed in PMS 907.
- f. Contractor employees who, as of 12/31/95, completed the required training specified in Exhibit I for one or more of the positions listed for this contract, and have documentation to validate such training; and meet the experience requirements specified in Exhibit I, and have documentation to validate such experience for the position(s), can be considered qualified. Contractor shall maintain a complete set of the records that validate the employee completed all

of the Exhibit I required training as of 12/31/95, and records that validate they meet the experience requirements listed in Exhibit I.

g. A valid and current Wildland Fire Qualification System certification record (Red Card or similar official agency document) for the positions listed for this contract from NWCG member agencies in the western States (Oregon, Washington, California, Idaho, Nevada, Alaska, Arizona, Utah, and Montana) will be acceptable support documentation that an individual has met the training and experience requirements for this contract.

h. Contractor shall maintain in their records, on employees who possess such a current certification record, either a letter on official letterhead paper from the issuing agency that states the certification record was valid or copies of the individual's training and experience records that validate the certification record. An example of employee record format is contained in Exhibit K, **Northwest Interagency Crew Agreement** - "Suggested Crew Training Record Format."

i. Contractor shall be responsible for employee training and experience records in such a manner that they can be easily obtained and available for inspection at any time during the contract period.

j. Contractor may use Government incidents, for which they are requested and assigned, to qualify and certify employees for FFT1 and CRWB positions. Only one training OR evaluation assignment will be permitted per crew on each incident. The coach/evaluator must, as a minimum, be certified in the position they are coaching or evaluating and will be a paid member of the contract crew. The trainee will be in addition to the contract crew and paid by the Contractor – they are not charged to the Government. (See Exhibit J, **Northwest Interagency Crew** (PTB) for incident evaluation assignment procedures.)

Work Environment

The work is performed in a forest and rangeland environment in steep terrain where surfaces may be extremely uneven, rocky, covered with thick tangled vegetation, etc. Temperatures are frequently extreme, both from the weather or from the fire. Smoke and dust conditions are frequently severe.

Physical Demands

The work requires strenuous physical exertion for extended periods including walking, climbing, chopping, throwing, lifting, pulling and frequently carrying objects weighing fifty (50) pounds or more.

Fitness and Work Capacity

All crew personnel shall pass the “Work Capacity Fitness Test” at the arduous level (3-mile hike with a 45-pound pack in 45 minutes or less). Copies of the publication titled “Fitness and Work Capacity,” second edition NFES 1956 April 1997, and associated videos can be purchased from the National Interagency Fire Center, 3833 S. Development Avenue, Boise, ID 83705. If requested by Government, Contractor shall provide proof that employee(s) has/have met this requirement.

Identification of Personnel

Every person performing work under this contract shall carry a picture identification card issued for the effective calendar year of this contract. Information on the card shall include name of person typewritten or printed, photograph of the person, their social security number, list of position(s) the person is qualified for, and their required work capacity fitness test score. The identification card must be signed by the certifying authority that individual has met all training requirements of this contract.

FIRE SUPPRESSION REQUIREMENTS

Applicable to Subitem S

Dispatch

Contractor's personnel will be dispatched to wildland fires following established agency dispatch procedures. The existence of a fire is no guarantee of a fire assignment. Contractor's crew may either be assigned to firefighting duties or held in reserve as preparedness forces. Government representatives retain the right to determine the services required from Contractor within the scope of this contract.

Length of Firefighting Assignment

When performing firefighting duties, the length of assignment shall not exceed 14 days, excluding travel, unless an exception is made by the CO. Upon completion of the 14-day assignment, the Contractor shall contact the CO prior to any further assignment. It is the primary responsibility of the Contractor to provide initial attack services for the designated duty station. Therefore, the Contractor may be required to return to the duty station and not be available for further dispatch. Upon return to the duty station, Contractor shall ensure that crew members receive adequate rest and recuperation prior to resuming work under this contract.

Crew Transportation and Travel

1. Contractor shall provide dependable ground transportation that meets all State and federal laws relating to motor vehicles operating within the States of **Oregon and Washington**. The vehicle(s) must be four-wheel drive capable of carrying the crew and equipment to and from the fire line. Vehicle(s) that become inoperable will be towed at Contractor's expense.
2. The cost of crew transportation is considered to be incidental to performing work under this contract and is to be included in the bid price. The Contractor is responsible for vehicle maintenance including normal wear and tear.
3. Government reserves the right to conduct Contractor worker transportation vehicle safety inspections upon Contractor arrival. (See Exhibit O, Northwest Interagency Crew Agreement - "Vehicle Safety Inspection Form.") Vehicle(s) that are determined to be unsafe for operation may be rejected. Rejected vehicle(s) shall be brought into compliance or replaced by Contractor within 24 hours.
4. Contractor vehicles must have external identification. The identification must be located on front driver side and passenger side doors. As a minimum, the identification must include the Contractor's business name as it appears on the contract.

General Requirements

1. Coordination - Contractor and Government shall each appoint a representative to deal with all matters pertaining to this contract, including work assignments, daily actual crew strength, names of crew members assigned and time on shift.
2. Work Schedules - When performing preparedness duties, the work shift will ordinarily be 8 hours per day, 5 days per week. The work schedule, including time on and off shift and work days, will be established by the Government based on fire danger and tasks..
3. Accidents -
 - a.. Contractor's insurance shall cover all employee accidents as specified by state law. The Government will provide first aid to employees when needs arise due to work under this contract. In life threatening situations, first aid will be given and further medical aid will be charged back to the Contractor. If a crew person is injured while working under this contract, the crew person may be evacuated by the Government at Contractor expense. If a crew person becomes ill or injured while working under this contract and requires transport to medical facility or hospital, the costs will be at the Contractor's expense.
 - b. Contractor shall provide the Single Resource Boss-Crew with an adequate supply of appropriate insurance forms, insurance ID card(s), and other necessary documents. Such documents shall accompany crew member(s) when a medical need arises.
4. Drug/Alcohol Free Work Place - Contractor and Contractor employees are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession or use of controlled substances and alcohol under applicable state and federal statutes. This contract includes Federal Acquisition Regulation (FAR) Clause 52.223-6 (Drug Free Workplace (JAN 1997)), by reference with the same full force and effects as if it was in full text.

Definitions Applicable to Preparedness Activities, Subitem S

AGENCY - Same as GOVERNMENT

BRUSHING - Removing live vegetation by slashing and pruning for the purpose hazardous fuel reduction and safety. Severed vegetation may be scattered or piled.

CERTIFYING AUTHORITY - CONTRACTOR who is responsible for all training, safety and employer requirements for crew members.

CONTAINMENT - Completion of a fireline around a wildland fire and any associated spot fires to stop the fire's spread.

CONTRACTOR - The legal entity, whether by and through its owners, corporate officer of the company or legally appointed representative, to whom this contract has been awarded.

CREW - 20-person crew consists of 17 Firefighter Type 2 (FFT2), and 1 Crew Boss (CRWB) and 2 Squad Bosses, Firefighter Type 1 (FFT1). 10-person crew consists of 8 Firefighter Type 2 (FFT2), 1 Squad Boss, Firefighter Type 1 (FFT1) and 1 Crew Boss (CRWB). 5-person crew consists of 3 Firefighter Type 2 (FFT2) and 2 Firefighter Type 1 (FFT1)

CREW PERSON - Basic wildland firefighter which is a resource used in the control and extinguishment of wildland fires and works as a member of a crew under the supervision of a higher qualified individual.

FIRELINE - A barrier constructed to stop or limit fire spread by clearing an area of all live and dead vegetative material to a specified width (usually 4-8 feet) and clearing a line or trail of a specified width (usually 12-24 inches) to mineral soil along the outer half of the cleared area.

FUEL MODIFICATION ZONE CONSTRUCTION - Treatment of an area to reduce adverse wildland fire effects, limit rate of spread, and establish defensible areas during fire suppression activities by cutting trees, slashing shrubs and small vegetation, pruning, and snag felling. Treated areas are usually along ridge lines, between separate stand and vegetative types, or adjacent to private property.

FUELS PULLBACK - Removing surface fuels from the base of standing trees and snags for a specified distance and removal of ladder fuels by pruning for a specified height.

GOVERNMENT - Any of the following, either singly or in combination: United States Forest Service (USFS), National Park Service (NPS), Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), and United States Fish & Wildlife Service (USFWS).

GOVERNMENT REPRESENTATIVE - Any designated employee of the agencies listed under the definition of GOVERNMENT.

INITIAL ATTACK - Actions taken by the first forces to arrive on a fire in an effort to slow or limit the spread of the fire.

LOPPING - After felling, cutting branches, tops, and unwanted boles into lengths such that resulting debris will lie close to the ground.

LOP AND SCATTER - Lop debris and spread it more or less evenly over the ground.

MOP-UP: Extinguishing or removing burning material near firelines, trenching logs to prevent rolling, and the careful examination and monitoring of all burned material to ensure it is extinguished.

NORMAL WEAR AND TEAR - For the purpose of this agreement. the term "normal wear and tear" shall include, but not be limited to:

- a. Brush scratches on the body of the vehicle.
- b. Punctures, tears or destruction of tires and/or sidewalls due to rocks or sticks common to the working environment.
- c. Wear on the paint on the inner and outer surfaces of the vehicle, top, sides, rails and tailgate. There may also be chips from flying rocks and minor bumps and dents on both the sheet metal and the bumpers.
- d. Clogged air filters and oil filters from dust.
- e. Damage or failure of power train (steering linkage and suspension) by either fatigue or operator error. Power train includes engine, clutch, transmission, transfer case, drive line, front and rear differentials, axles, wheels and bearings.

PREBURN FIRELINE CONSTRUCTION: Fireline constructed prior to a prescribed burn.

PREPAREDNESS: Activities assigned in advance of fire occurrence to ensure effective suppression action.

PRESUPPRESSION: Activities assigned in advance of fire occurrence to ensure effective suppression action.

PROPERTY:

- a. Accountable Property. Items with a purchase price of \$5,000 or more or items which the incident Agency considers sensitive (e.g., cameras, chainsaws) are accountable property. This property is generally tagged with an agency identification number.
- b. Durable Property. Durable properties are those non-accountable items which have a useful life expectancy greater than one incident (e.g., sleeping bags, water handling accessories, tents, headlamps, tools). This property may be marked with paint or etching to show "US GOVT," or an agency specific marking.

- c. Consumable Goods. Consumable goods are items normally expected to be consumed on the incident (e.g., batteries, meals ready to eat (MRE's), plastic canteens, and petroleum products). This property is not marked

PRUNING - Removal of live and dead limbs from standing trees for a specified height for the purpose of removing ladder fuels. Pruned material is usually pulled back from the tree bole for a specified distance.

SINGLE RESOURCE BOSS-CREW (CRWB): Responsible for supervising and directing a fire suppression hand crew.

SLASHING - Severing all live, standing vegetation of a specified size at a specified height above ground.

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICE OF OFFERORS

52.216-1 TYPE OF CONTRACT

(APR 1984)

The Government contemplates award of a indefinite-delivery, indefinite-quantity type of contract resulting from this solicitation.

52.216-27 SINGLE OR MULTIPLE AWARDS

(Oct 1995)

The Government may elect to award a single delivery order contract or task order contract or to award multiple delivery order contracts or task order contracts for the same or similar supplies or services to two or more sources under this solicitation.

52.237-1 SITE VISIT

(APR 1984)

Offerors or quoters are urged and expected to inspect the site where services are to be performed and to satisfy themselves regarding all general and local conditions that may affect the cost of contract performance, to the extent that the information is reasonably obtainable. In no event shall failure to inspect the site constitute grounds for a claim after contract award.

SECTION L - TECHNICAL PROPOSAL PREPARATION INSTRUCTIONS

L.1.0 Proposals which merely offer to conduct a program in accordance with the requirements of the Government's statement of work will be considered nonresponsive to this request and will not be considered further. The offeror must submit a definitive proposal to accomplish the requirements as stated in the RFP. The technical proposal should not contain any price information. No special forms are designated for preparation and submission of the technical proposal; offerors may use their own formats as long as the necessary information described herein is provided. Proposals shall be submitted in two parts consisting of (1) a technical proposal and (2) a price proposal. Each part shall be separate and complete in itself so that evaluation of one may be accomplished independently of the other. Sufficient and detailed information must be presented in the technical proposal to enable the Government to evaluate the proposal fully in accordance with Evaluation and Award Criteria contained herein. The Government is not obligated to ask for additional information and in the absence of appropriate information, the proposal will be rated deficient.

L.2.0 FORMAT AND CONTENT OF TECHNICAL PROPOSAL

Offerors will be required to provide information pertaining to specific treatments to be performed under this contract.

L.2.1 The technical proposal shall be divided into four sections as follows:

Section A - Introduction and Table of Contents
Section B - Employment and Training Opportunities
Section C - Past Performance/Organization
Section D - Personnel Qualifications and Experience
Section E - Technical Approach

L.2.2 Section A - Introduction and Table of Contents

Briefly explain the makeup of the technical proposal with an executive summary and table of contents to orient the evaluation team to the proposal.

L.2.3 Section B - Employment and Training Opportunities

- d. Employment - Explain how many employees in your current organization to be used in this contract are residents of the geographic area identified in C.1. Describe the organization's plan to provide employment opportunities for individuals in the geographic area identified in C.1, emphasizing employment opportunities in rural communities. Explain any outreach and recruiting techniques to be used. Actual accomplishment will be monitored after award.
- b. Training - Describe the organization's plan to provide training opportunities for individuals in the geographic area identified in C.1, emphasizing fuels treatment techniques and skills.

L.2.4 Section C - Past Performance/Organization

- a. Describe organization's experience in fuels treatment projects. Include numbers, complexity, and size of the projects. Include specific prescribed fire experience for proposals offering work under Subitems I, L, M, N. Describe circumstances surrounding any prescribed fires which were declared escaped within the last three years.
- b. Describe organization's historical record in performance of fuels treatment projects.
 - 1) Organization's tenure
 - 2) Organization's record of work experience and quality, especially in [43]. Include list of references (including names, phone number, and addresses).
- c. Describe the organization's management structure, with emphasis on its efficiency and effectiveness.

- d. Describe organization's adequacy to complete the work in a timely and satisfactory manner. Include a proposed work schedule and organizational resources to include the following:
 - 1) If you plan additional hiring for this project, relate how many of each specialty and crew you plan to hire. List training provided to personnel to be able to meet project objectives.
 - 2) Equipment and supplies

L.2.5 Section D - Personnel Qualifications and Experience

a. Supervisory Positions

- 1) Burn Boss, Ignition Specialist, Holding Boss, Mop-Up Boss, and Crew Supervisor are positions necessary to this solicitation. See C.2.0 for definitions for these positions. All personnel listed for these positions shall have demonstrated and performed satisfactorily within the past three years at the Complexity Class, fuel type, topography and type of ignition source to be used.

Burn Boss - List Burn Boss experience by complexities of burn and number of times performed at each level. (See C.2 - Definitions for burn complexity).

Ignition Specialist - List Ignition Specialist experiences by complexities and number of times performed at each level.

Holding Boss - List Holding Boss experiences by complexities and number of times performed at each level.

Mop-Up Boss - List Mop-Up Boss experiences.

Crew Supervisor - List supervisory experience.

- 2) Qualifications:

An individual may gain the ability to perform this work through a combination of fire training and on the job experience.

- 3) Provide a resume for burn bosses, ignition specialists, holding bosses, mop-up bosses and crew supervisors, including:
 - a) Education
 - b) Training

- c) Experience
 - i. prescribed burning in [43](Sagebrush, grass, litter, brush, slash, underburns.)
 - ii. prescribed burning at Class I and II burn complexity
 - iii. position assignments and numbers.

4) Describe the duties and responsibilities of these individuals under this contract.

b. Crew Member Positions

1) Qualifications:

An individual may gain the ability to perform this work by a combination of fire training, equipment operation training, safety training, and on-the-job experience.

2) Provide a description of crew member work force, including:

- a) Number of crew members available for this project
- b) A listing of training provided to personnel to be able to meet project objectives (i.e., fire behavior, water handling, ignition, safety, etc.).
- c) Experience
 - i. prescribed burning operations
 - ii. wildfire suppression
 - iii. fireline construction and slashing

c. Person(s) Preparing Prescribed Fire Plan

1) Qualifications:

An individual may gain the ability to perform this work through a combination of fire training, including fire behavior, fire effects, safety, and fire suppression; and on the job experience in both planning for prescribed burning and participation in burning.

2) Provide a resume including:

- a) Education
- b) Training
- c) Experience in planning and participation in prescribed burning
 - i. prescribed burning in [43] (Sagebrush, grass, litter, brush, slash, underburns.)
 - ii. prescribed burning at Class I and II burn complexity.

- iii. position assignments and numbers.
- iv. numbers and complexity of prescribed fire plans prepared.

L.2.6 Section E - Technical Approach

- a. Describe in detail a specific description of how the organization will plan for, and accomplish each of the following:
 - 1) Schedule and staffing plan to meet timeframes for burn unit preparation.
 - 2) Mobilize rapidly in the event smoke management clearance is received on the same day as requested burn day.
 - 3) Conduct burn operations on up to three units simultaneously in order to maximize burn opportunities.
 - 4) Local conditions and other factors that might cause control problems or other adverse fire behavior.
 - 5) Formulate general mop-up and patrol strategies that consider both conditions at time of ignition and holding and on changes in weather conditions and fuel moisture levels that could result from day to day following ignition and holding. For instance, if cool, moist weather is occurring or predicted, patrol may be satisfactory; whereas, if current or predicted condition are for hotter or dryer conditions, units may require mop-up to varying intensities in order to meet mop-up objectives.
 - 6) Develop and modify safety program and procedures based on hazards of each unit.
- b. Submit a detailed Prescribed Fire Plan for the Prescribed Burn Unit specified in Section J. Use data in the Prescribed Fire Plan in Section J. This plan shall show the ignition and holding plan, potential holding problems, important points for crew briefing, personnel and equipment necessary to execute the prescribed burn at the low, high, and desired end of the prescription window. Include proposed mop-up and patrol procedures and plan, and proposed equipment, wetting agents, and communications plan. Discuss local conditions and other factors that might cause control problems or other adverse fire behavior.

L.3.0 **FORMAT AND CONTENT OF PRICE AND BUSINESS PROPOSAL**

- L.3.1 The offeror shall enter unit prices and extended totals for each item listed on the Bid Schedule, Section B. These prices shall include all labor, materials, overhead and profit.

- L.3.2 The offeror shall complete and submit Section K, Representations, Certifications and Other Statements of Offerors.
- L.3.3 An offeror's proposal is presumed to represent the best effort to respond to the solicitation. Any inconsistency, whether real or apparent, between promised performance, and cost or price, should be explained in the proposal. For example, if the intended use of new and innovative production techniques is the basis for an abnormally low estimate, the nature of these techniques and their impact on cost or price should be explained, or if a corporate policy decision has been made to absorb a portion of the estimated cost, that should be stated in the proposal. Any unexplained inconsistency within the proposal raises a fundamental issue of the offeror's understanding of the nature and scope of work required and of the financial ability to perform the contract, and may cause the proposal to be excluded from the competitive range.

SECTION M - EVALUATION FACTORS FOR AWARD

M.1.0 EVALUATION AND AWARD FACTORS

Each proposal submitted on this solicitation will be evaluated according to all of the criteria stated below. An objective technical evaluation will be performed on each offeror's technical proposal based on the information furnished and subsequent information gathered after proposals are received, and not on previous knowledge or associations. Accordingly, the following criteria will be scored respectively with the corresponding points associated with each area with a maximum total of 50 points attainable for all treatment activities except prescribed burning, or 100 points for all activities including prescribed burning.

M.2.0 EVALUATION FACTORS

M.2.1 Proposals shall be prepared in accordance with Technical Proposal Preparation Instructions, as set forth in Section L. The following major factors and subfactors shall be used in the evaluation of the proposals:

Section A - Introduction and Table of Contents

Section B - Employment and Training Opportunities (30 points)

- a. Contractor's plan for providing employment opportunities to people in local rural communities. (15 points)
- b. Contractor's plan for providing training opportunities to people in local rural communities. (15 points)

Section C - Past Performance/Organization (20 points)

- a. Degree of experience in projects comparable to the RFP as viewed in terms of the number, complexity, and size of the projects. (5 points) [44]
- b. Past performance in similar projects as viewed in terms of schedule adherence, planning and implementation of projects, and acceptability of the end products. Knowledge of the local area where work will be performed. If sufficient detail on past experience is not provided, it will be assumed that the offeror's experience is not comparable or was not satisfactory. (5 points)
- c. Managerial structure that indicates efficiency and effectiveness would be one in which multiple projects could be undertaken simultaneously. (5 points)

- d. Ability of the organization to provide services in a timely manner and satisfactory manner including fire preparedness crew(s). Equipment types, numbers and availability. (5 points)

THE FOLLOWING CRITERIA APPLICABLE ONLY TO PRESCRIBED FIRE SUBITEMS
(Subitems I, L, M, N)

Section D - Personnel Qualifications and Experience (25 points)

- a. The name, specific qualifications, credentials and level of experience practical or educational, for the person(s) who will be assigned to supervise this project, as Burn Boss, Ignition Specialist, Holding Boss, Mop-Up Boss and Crew Supervisor. (See Definitions in Section - C.2.0). Include qualifications and experience in determining when fuel (both live and dead) conditions are in prescription for burning to meet resource and prescribed fire objectives. Emphasis will be placed on having a larger number of qualified people to fill these positions, and experience levels. Qualifications and experience will be evaluated utilizing the standards described in the Wildland and Prescribed Fire Qualification System Guide, published by the National Wildfire Coordinating Group, Publication Numbers PMS 310-1 and NFES 1414, January 2000; and PMS 310-1 (Part 2) and NFES 2479, Feb. 1995. Task Books include: (1) Prescribed Fire Ignition Specialist, PMS 311-75 and NFES 2486; and (2) Prescribed Fire Burn Boss, PMS 311-74 and NFES 2485; both Feb. 1995.
- b. The numbers, training, and experience of the crew members available during burn season periods. Emphasis will be placed on a high ratio of trained and experienced personnel to less trained and experienced personnel.
- c. The name, specific qualifications, credentials and level of experience practical or educational, for the person(s) who will be assigned to prepare Prescribed Fire Plans. Emphasis will be placed on expertise to formulate ignition plan, personnel and equipment needs, and safety considerations to resource and prescribed fire objectives and fire behavior.

Section E - Technical Approach (25 points)

- a. General Technical Approach (10 points)
 - 1) Adequacy of the workforce and schedule in meeting timeframes for burn unit preparation.
 - 2) Response time for mobilization when burn clearance is received on same date as requested burn.

- 3) Adequacy of plan for conduction of up to three independent ignition and mop-up operations simultaneously.
- 4) Identification, understanding, and ability to plan for adverse local conditions and factors.
- 5) Understanding of conditions and changes in conditions which will impact meeting mop-up objectives, and the adequacy of mop-up and patrol strategies to meet mop-up objectives.

b. Prescribed Fire Plan (15 points)

The completed Prescribed Fire Plan for the Burn Unit specified in Section J will be evaluated for adequacy of the plan to meet stated resource and prescribed fire objectives; technical feasibility; recognition of potential holding problems and safety hazards; identification of additional forces for escapement contingency; adequacy of workforce and equipment to perform the task; mop-up provisions that address each of the three prescription ranges; and qualifications of the individuals identified to act as burn boss, ignition specialist, holding boss, and mop-up boss.

M.3.0 OTHER CRITERIA

The Contracting Officer shall consider several factors in the selection process which are important, but have not been assigned points or values, such as:

- a. Proposal must respond to all the requirements of the RFP and must include all information specifically required in all sections of the RFP.
- b. Award will not be made to any offeror unless agreement can be reached on all general and special provisions.

M.4.0 CONTRACT AWARD

M.4.1 The Government's objective is to obtain the highest quality considered necessary to achieve the objectives with a realistic and reasonable price. Technical evaluation factors as a whole are more important than price; however, between proposals that are evaluated to be technically equal, the price to the Government will be a major selection factor. Award may be made for all or for specific subitems, and may be made without discussions.

M.4.2 This request does not commit the Government to award a contract nor to pay any costs incurred in preparing plans or proposals.